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**AFRL-VA-WP-TR-1999-3020**

**AN EXPERIMENTAL INVESTIGATION OF  
TANGENTIAL BLOWING TO REDUCE BUFFET  
RESPONSE OF THE VERTICAL TAILS OF AN  
F-15 WIND TUNNEL MODEL**

**VOLUME 3 – OSCILLATORY PRESSURE DATA**

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**JANUARY 1999**

**FINAL REPORT FOR 06/01/1996 – 12/31/1998**

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**Air Vehicles Directorate  
Air Force Research Laboratory  
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This technical report has been reviewed and is approved for publication.

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## FOREWORD

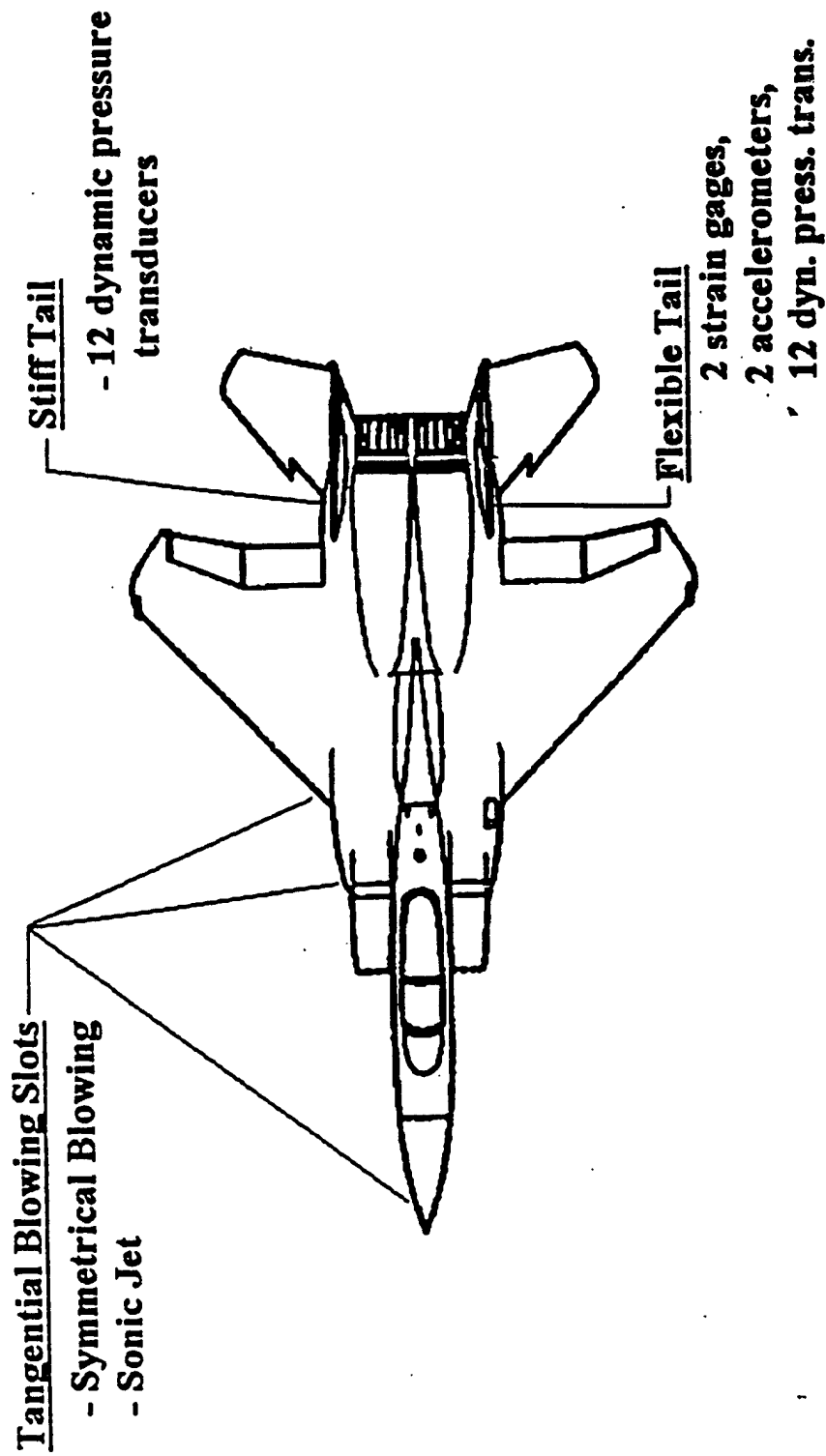
This report was prepared by Dr. Marty Allen Ferman, Consultant for CSA Engineering of Palo Alto, California. The work was performed under Contract F33615-94-3200, Task 3413-31 for the Air Vehicles Directorate of the Air Force Research Laboratory, Wright-Patterson Air Force Base, Ohio. Mr. Elijah W. Turner was the Air Force Project Engineer. This effort was sponsored by the Unsteady Aerodynamics Integrated Product Team (IPT) of the Air Vehicles Directorate, Air Force Research Laboratory. Mr. Lawrence J. Huttshell was Chairman of the IPT.

The work by Dr. Ferman was conducted between 15 June 1996 and 15 October 1998 under job order number 24044951. The data presented in this report were reduced by Mr. Dansen Brown of the Acoustics and Sonic Fatigue Branch, Structures Division, Air Vehicles Directorate, Air Force Research Laboratory from the 4.7% F-15 Vertical Tail Buffet Test.

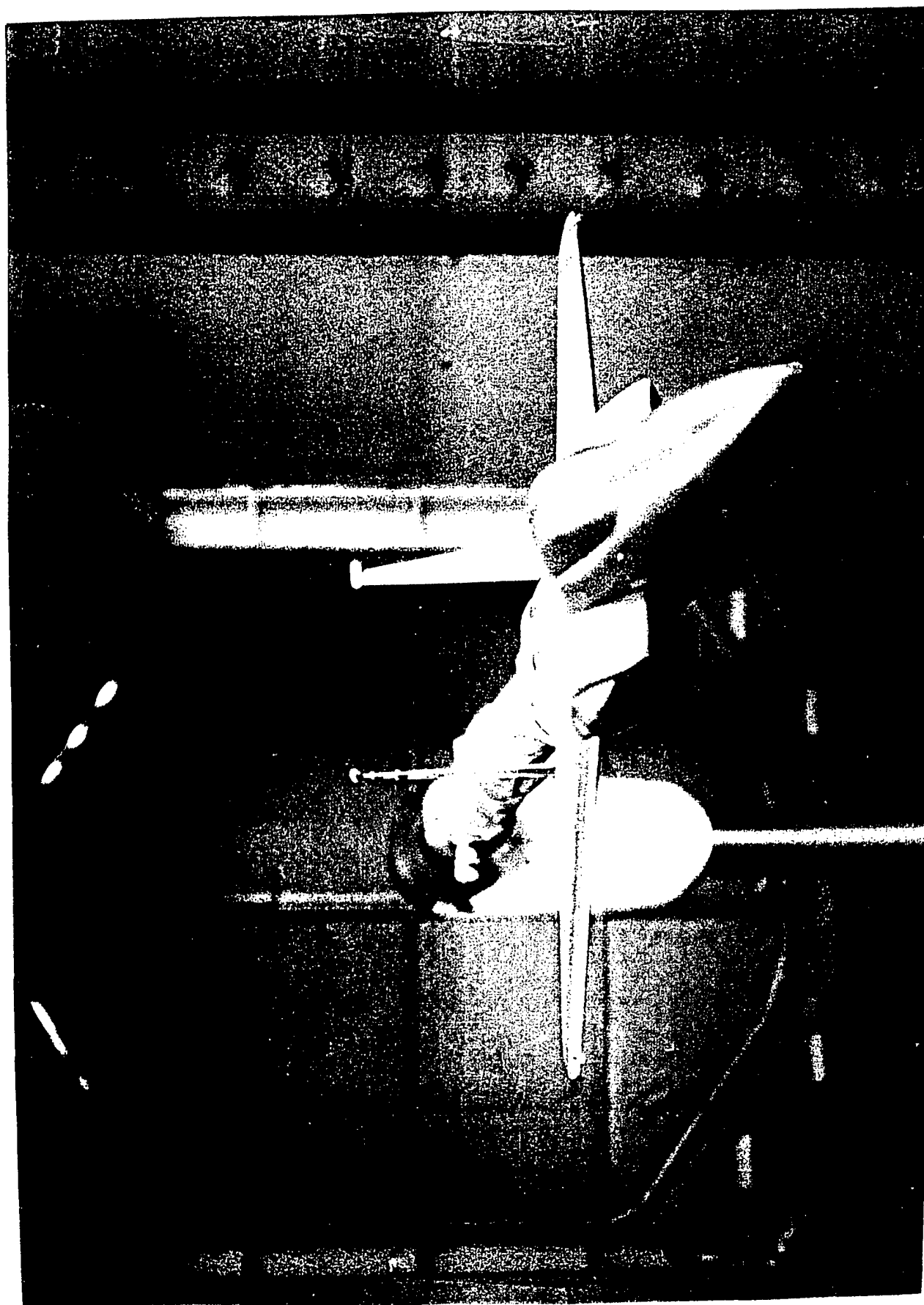
The Buffet Tests were conducted in the Subsonic Aerodynamics Research Laboratory (SARL) wind tunnel at Wright-Patterson Air Force Base in October and November of 1995. The Test Engineer was Mr. Jon Tinapple of the Aerodynamic Configuration Branch, Aeronautical Sciences Division, Air Vehicles Directorate, Air Force Research Laboratory.

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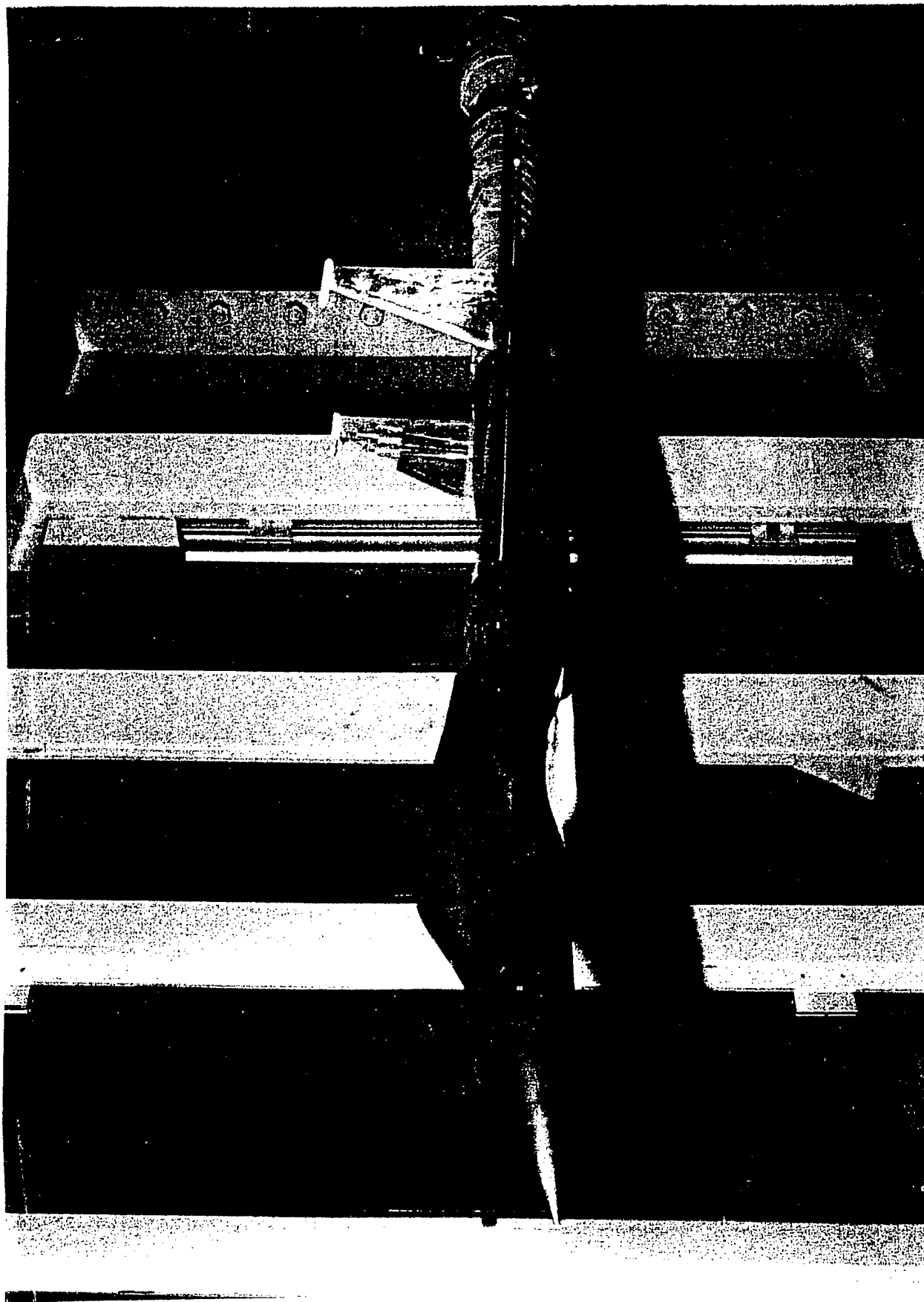
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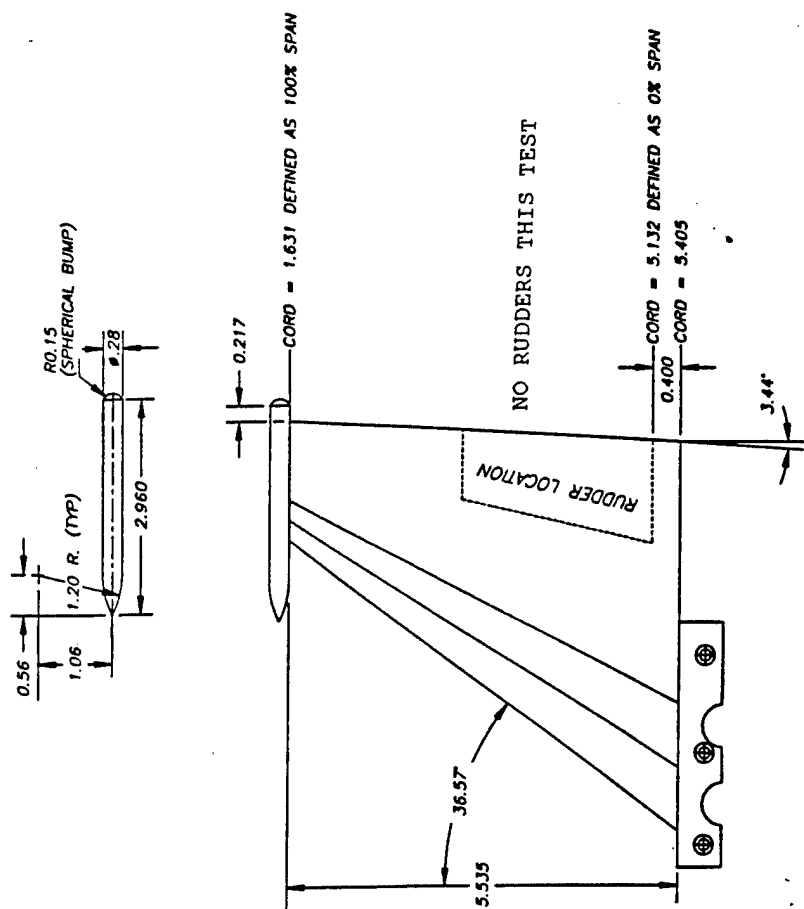
2.1.1 PLANVIEW OF 4.7 % F-15 WIND TUNNEL MODEL



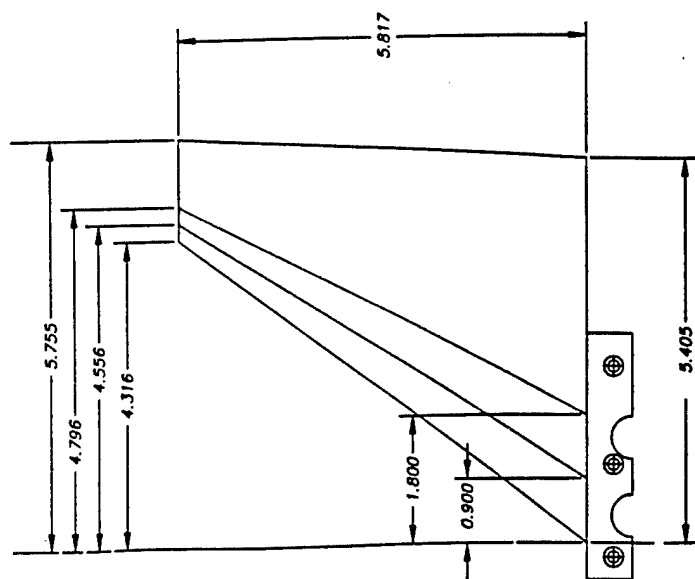
2.1.2 4.7% BUFFET MODEL IN WIND TUNNEL



2.1, 3 4.7 % MODEL - VIEW FROM FLEX TAIL SIDE



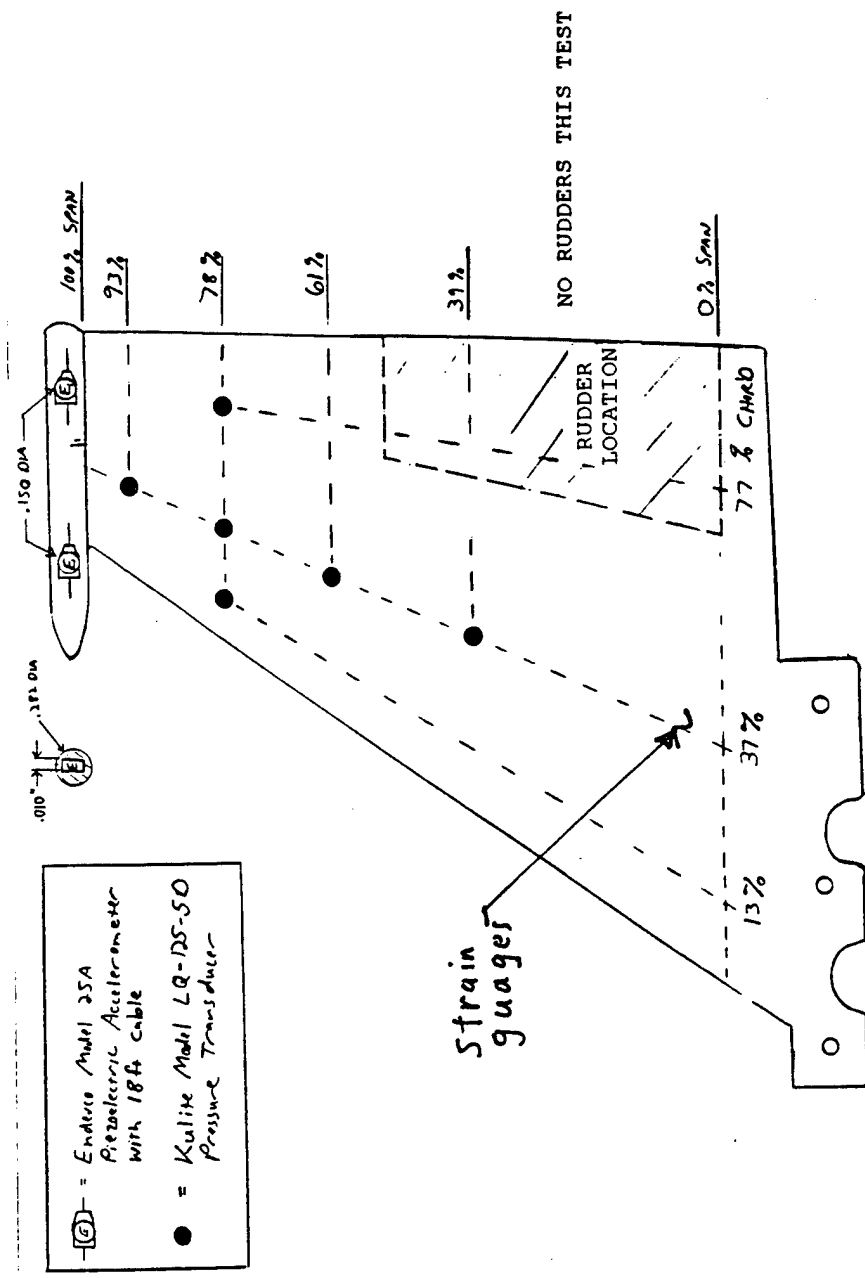
DETAILS OF VERT. TAIL WITH TIP POD



VERT. TAIL GEOMETRY WITHOUT TIP PODS

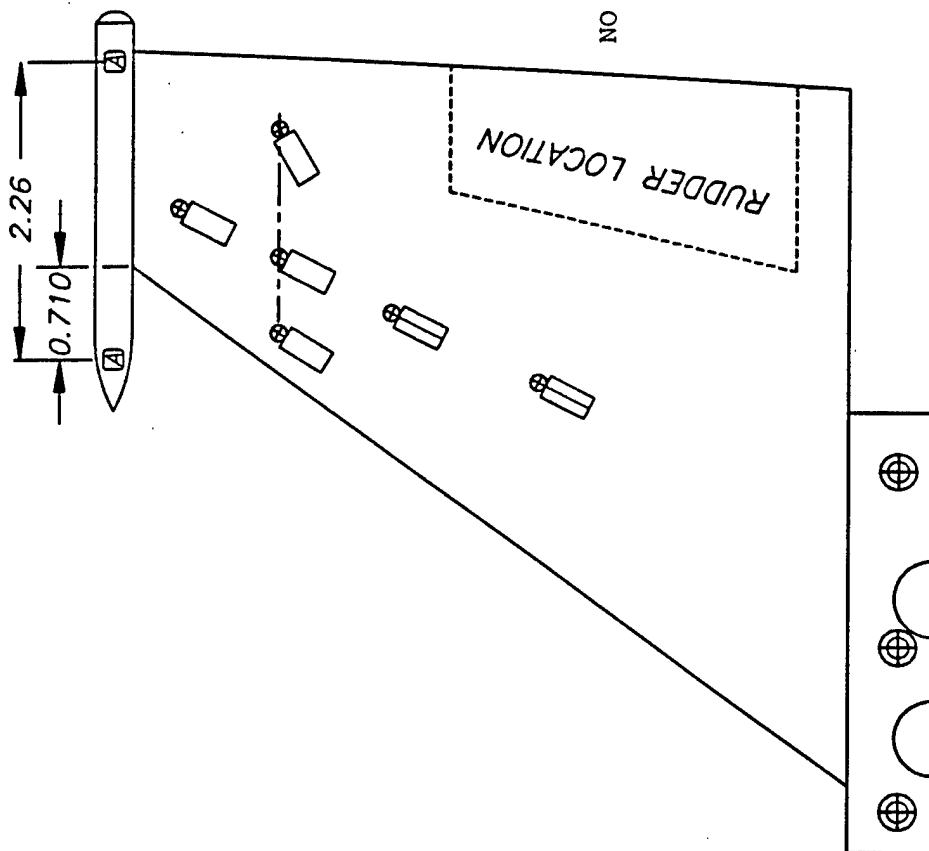
GEOMETRY OF 4.7% SCALE VERTICAL TAIL

2.1, 4



2.1.5 FIG: INSTRUMENTATION LAYOUT ON FLEXIBLE VERTICAL TAIL





NO RUDDERS IN THIS TEST

2.1.1  $P_1$  PRESSURE TRANSDUCER LAYOUT - BOTH TAILS

# FLEXIBLE TAIL

# RIGID TAIL

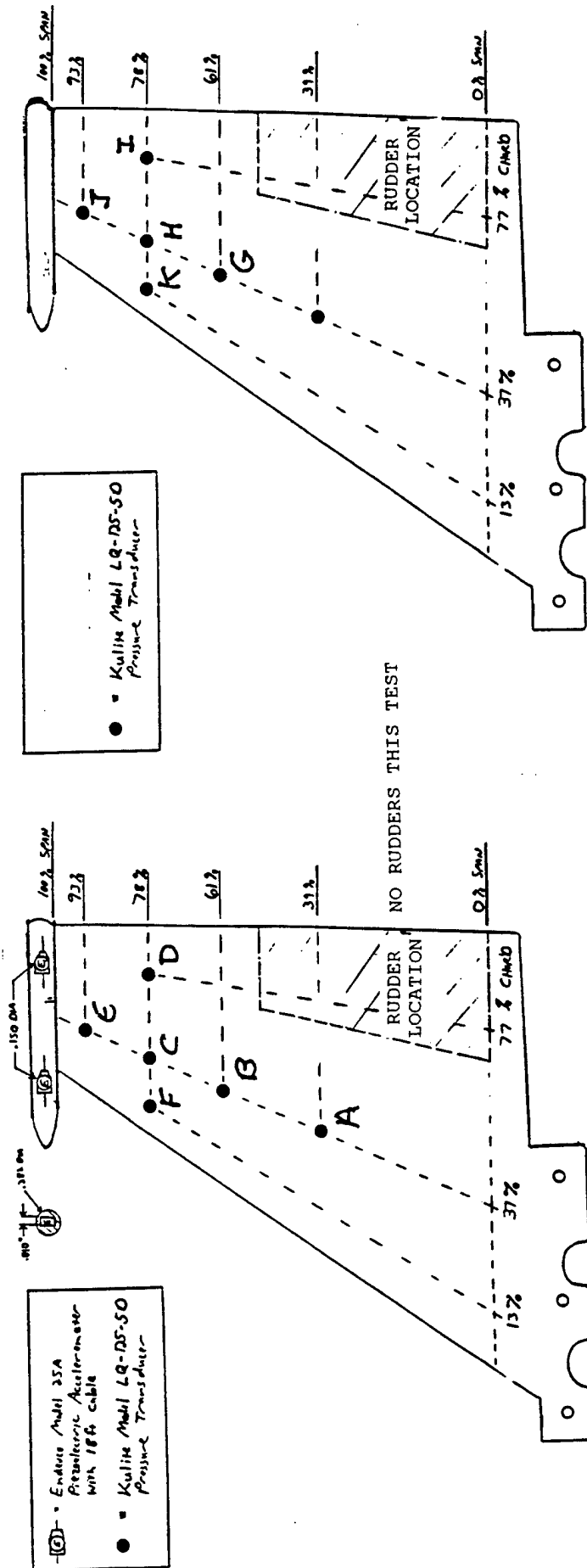


FIG 10 p. 1

PRESSURE TRANSDUCERS- LETTER IDENTIFICATION

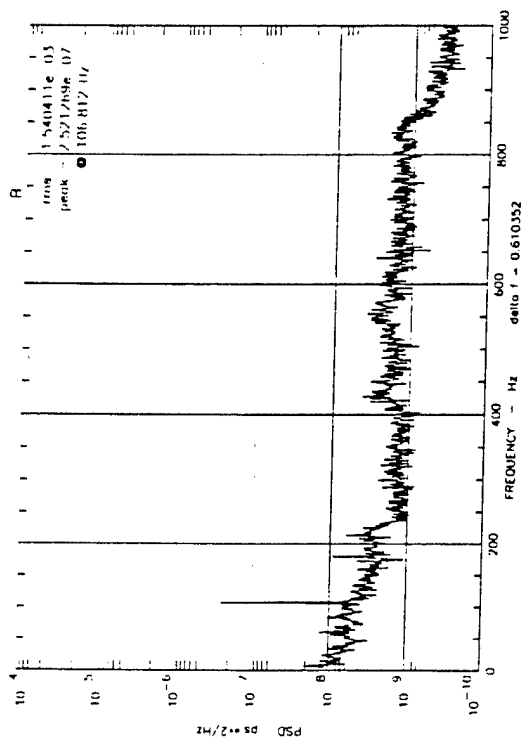
## **2.0 DIMENSIONAL PRESSURE DATA, FLEX. AND RIGID TAILS**

**PRESSURE PSD's**

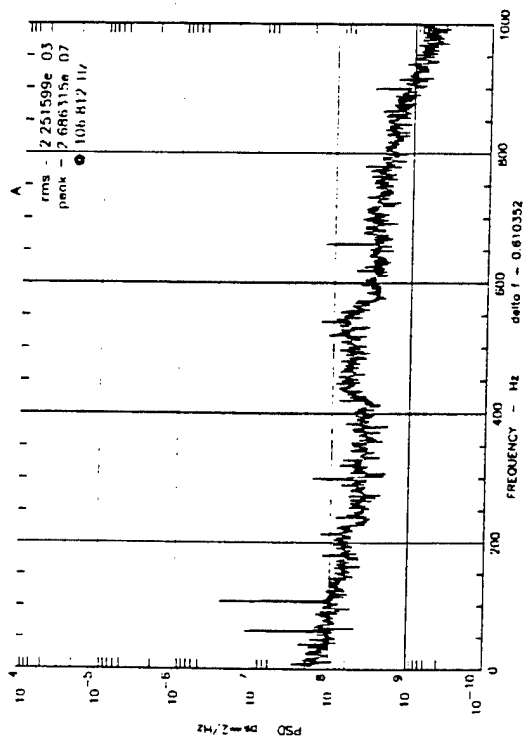
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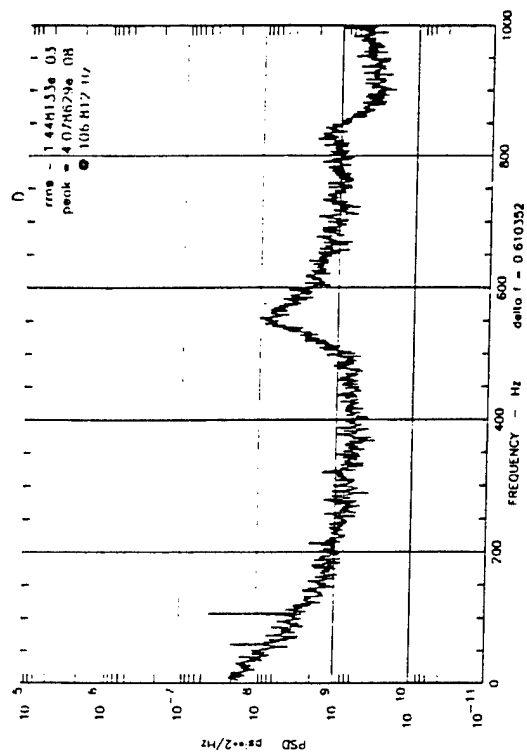
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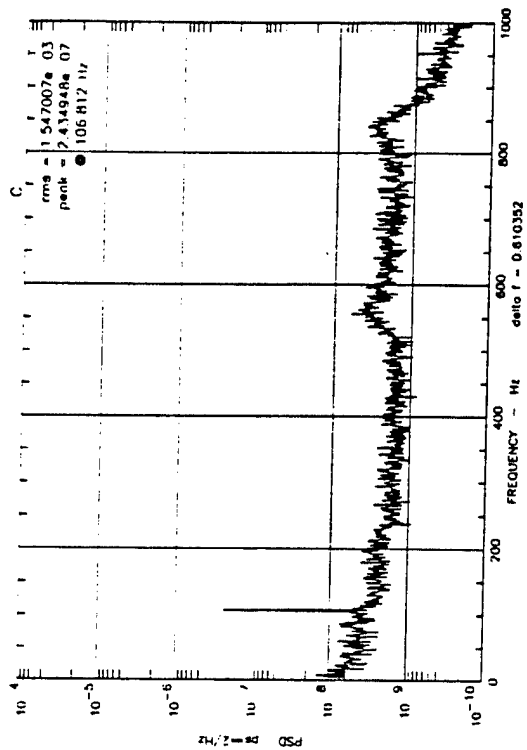
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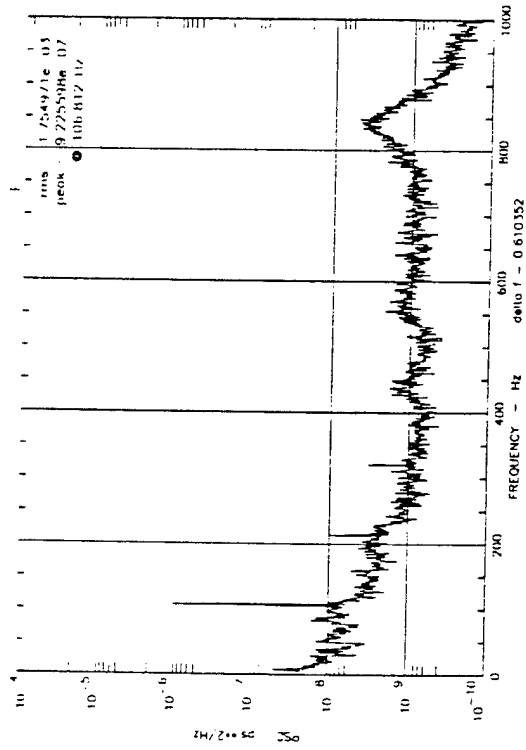
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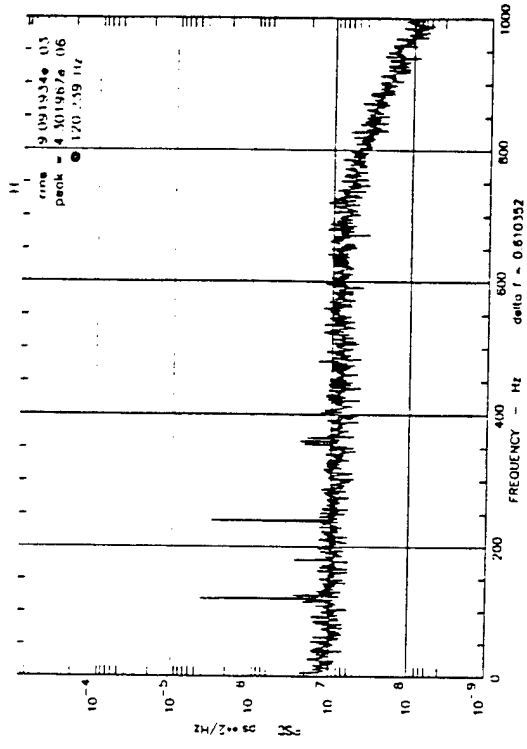
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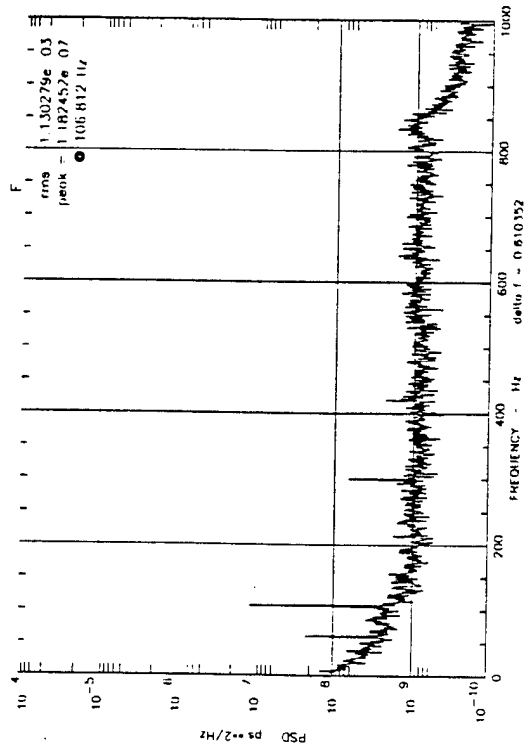
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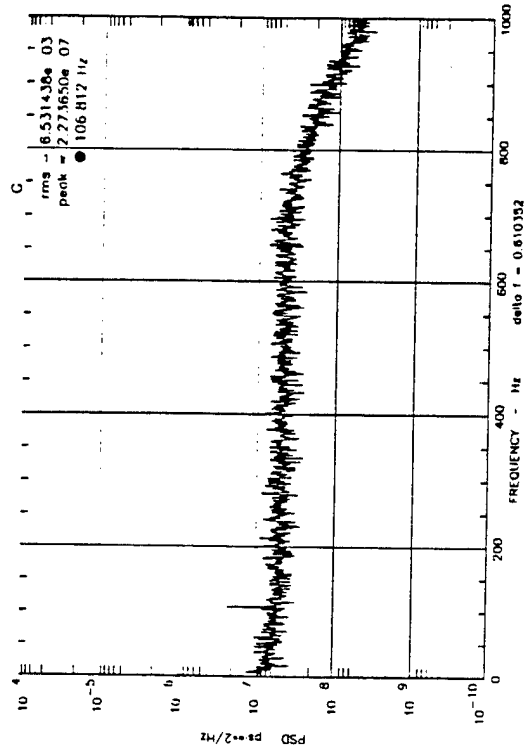
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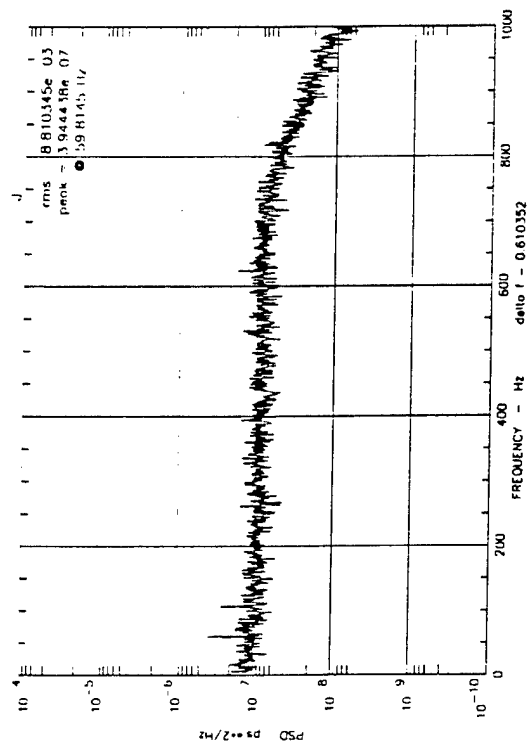
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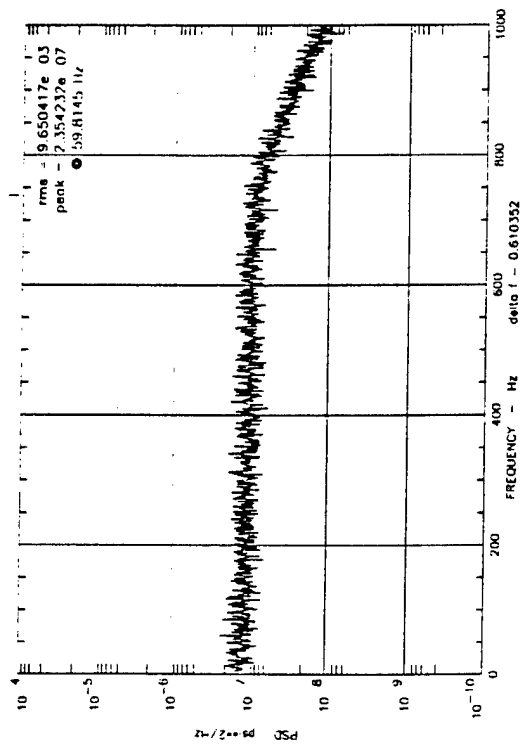
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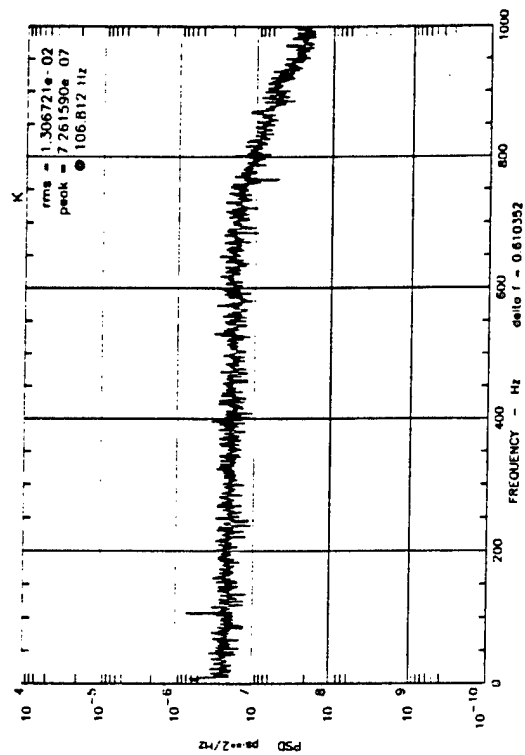
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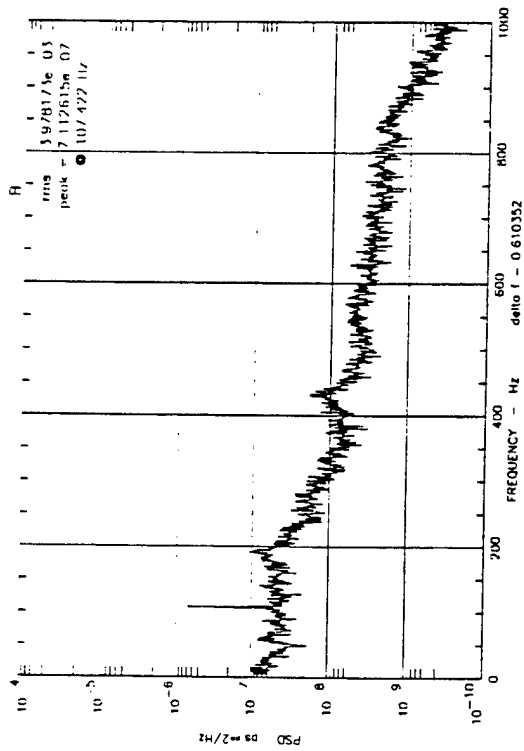
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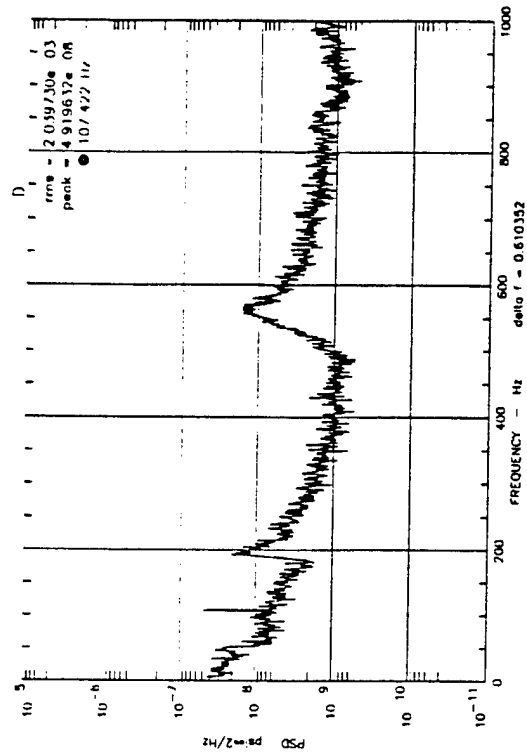
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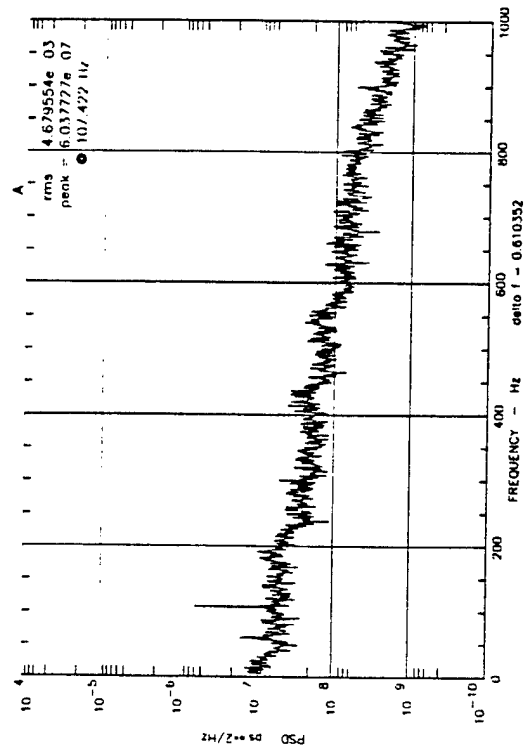
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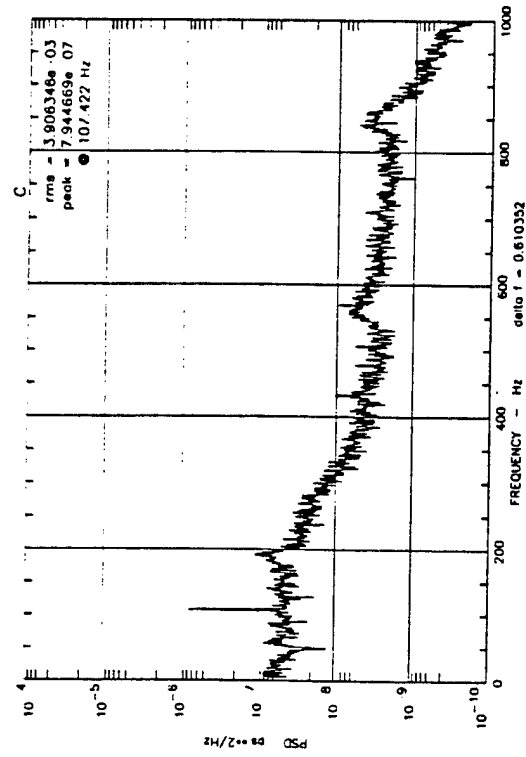
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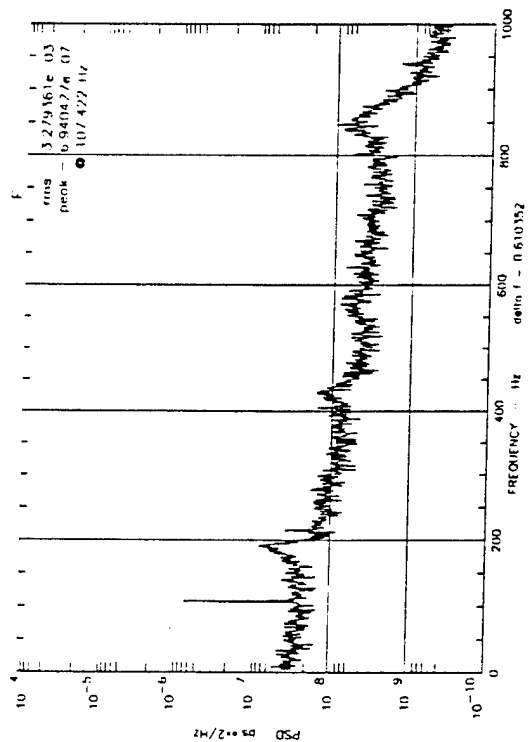


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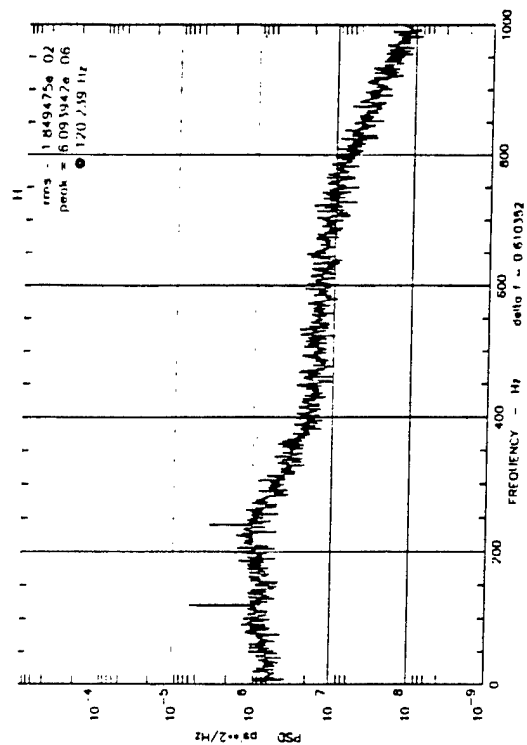




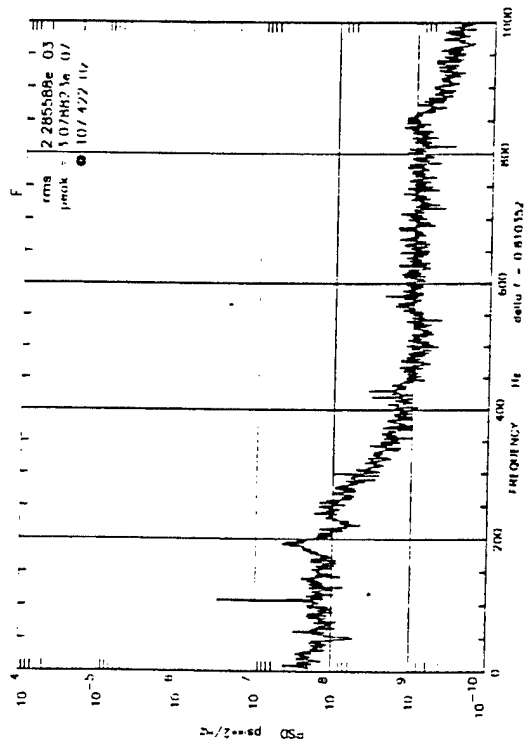
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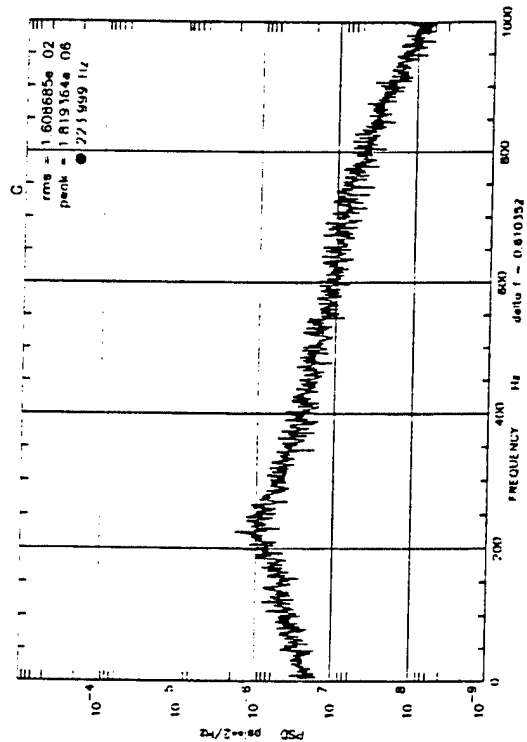
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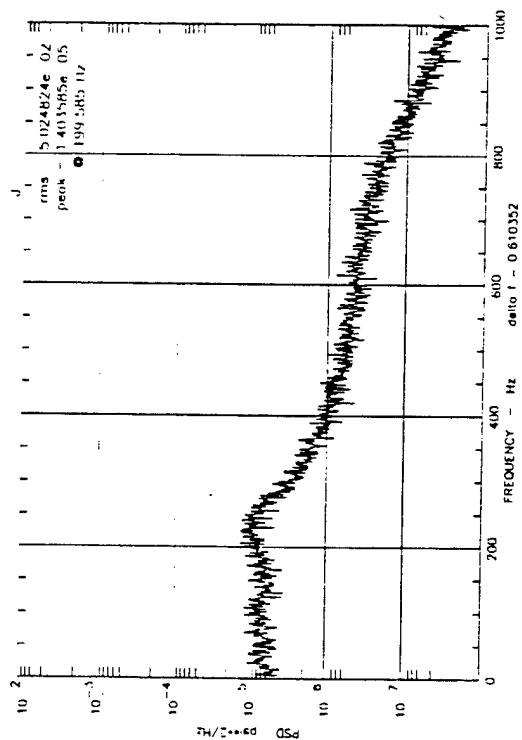
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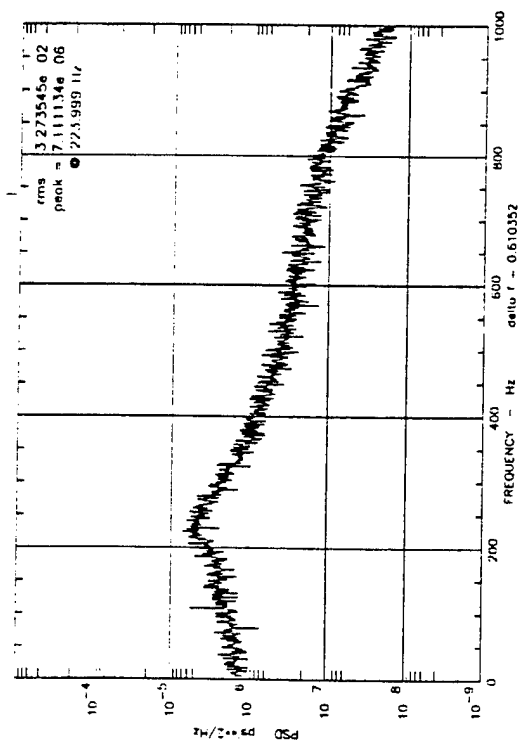
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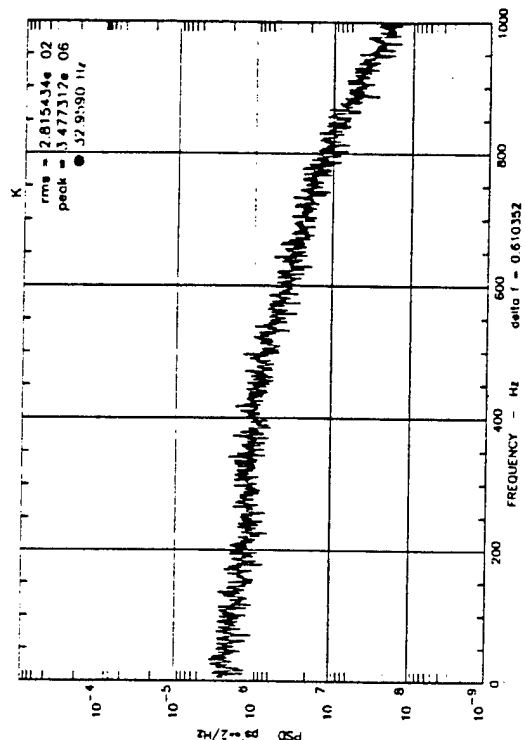
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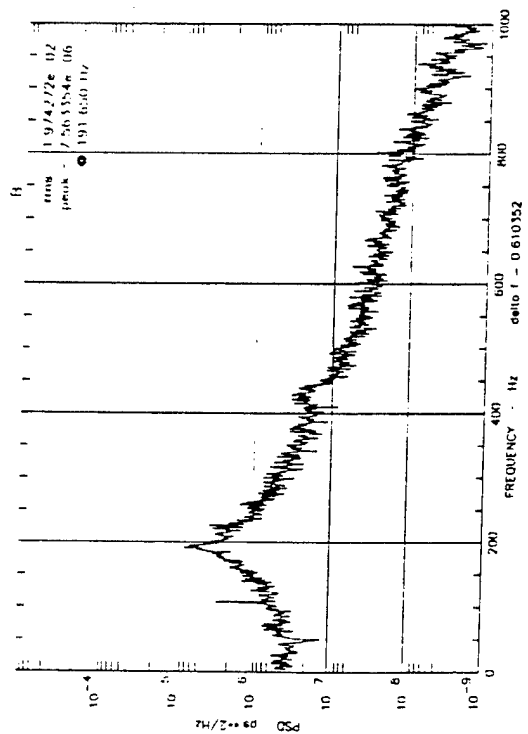
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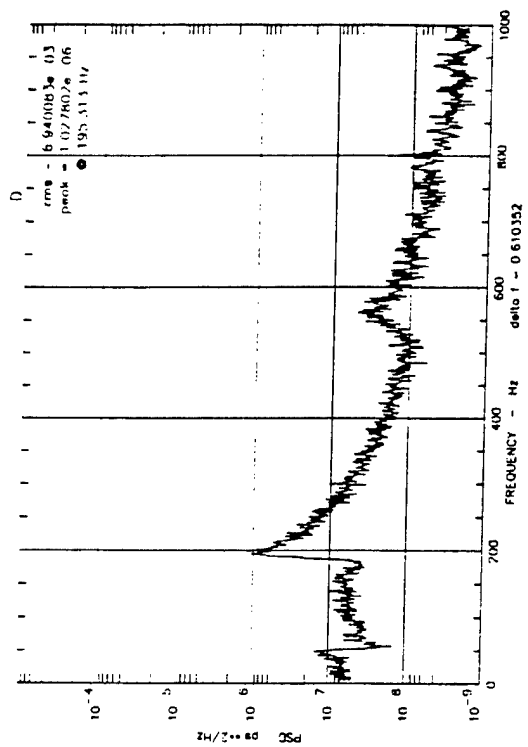
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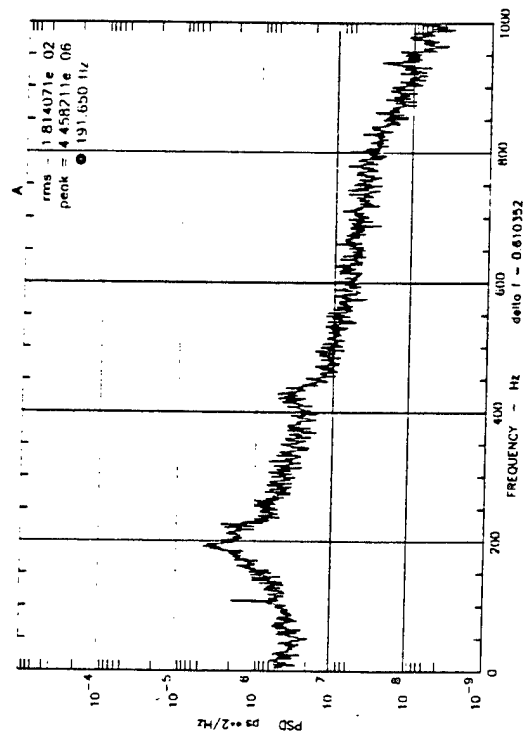
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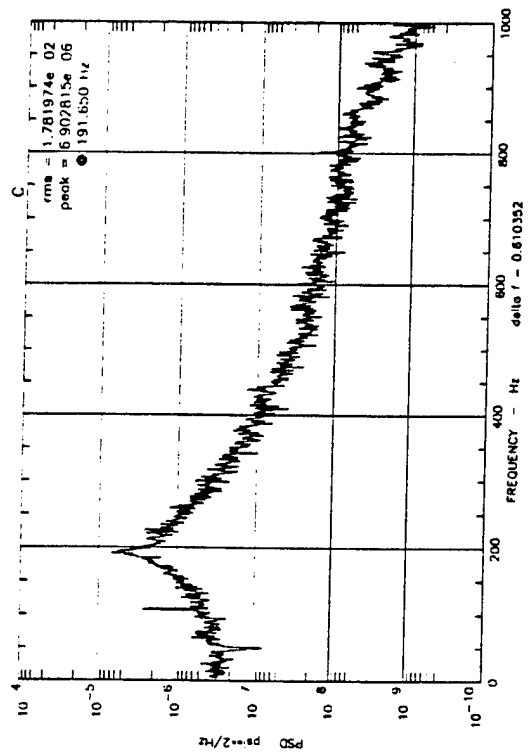
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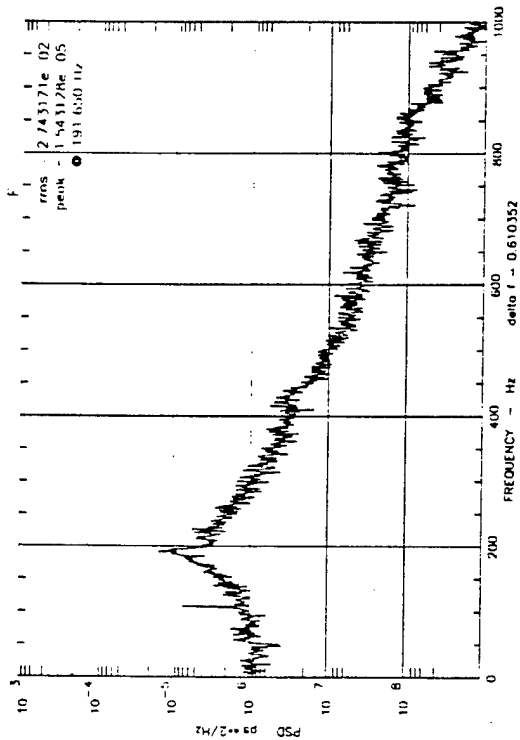
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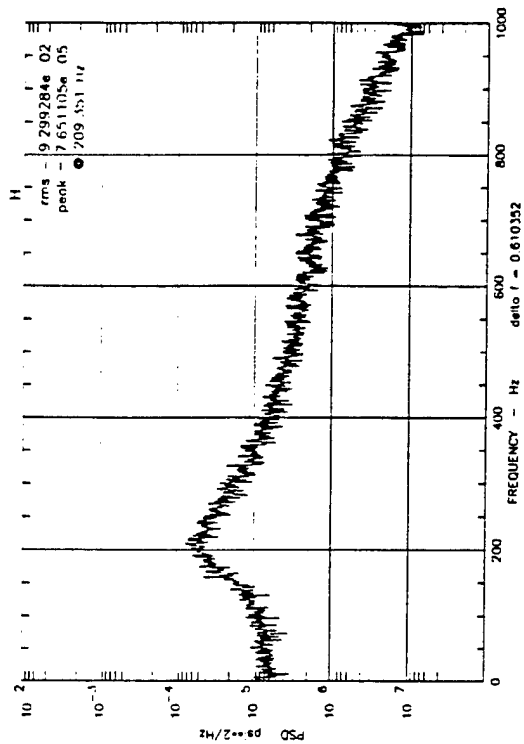
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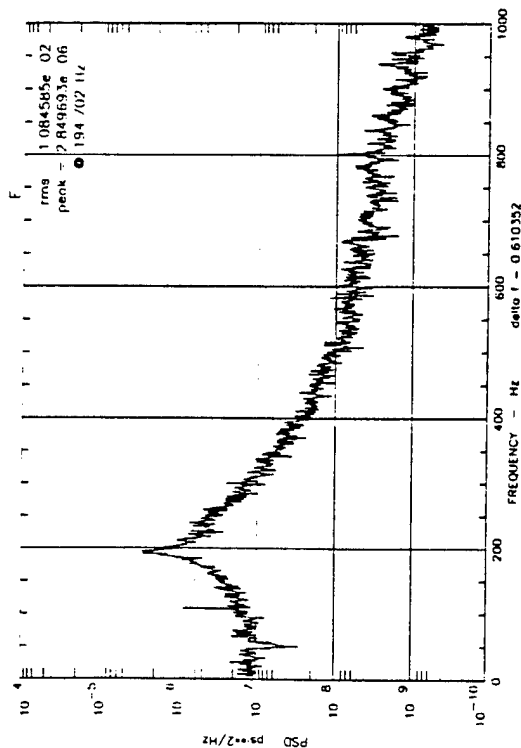
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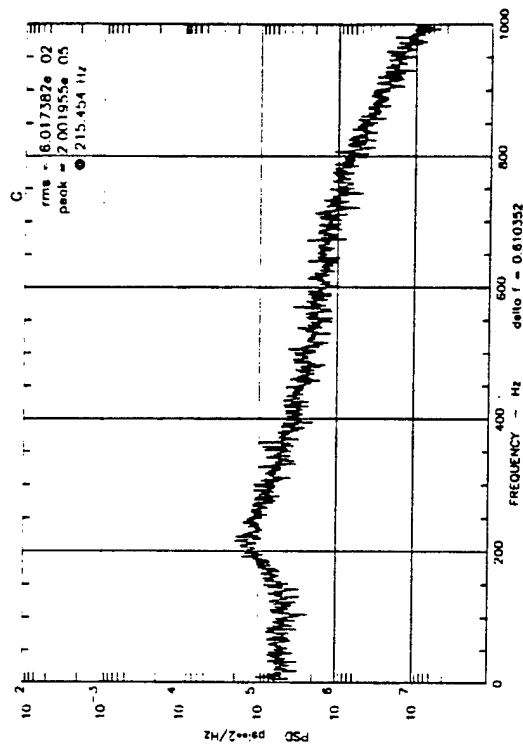
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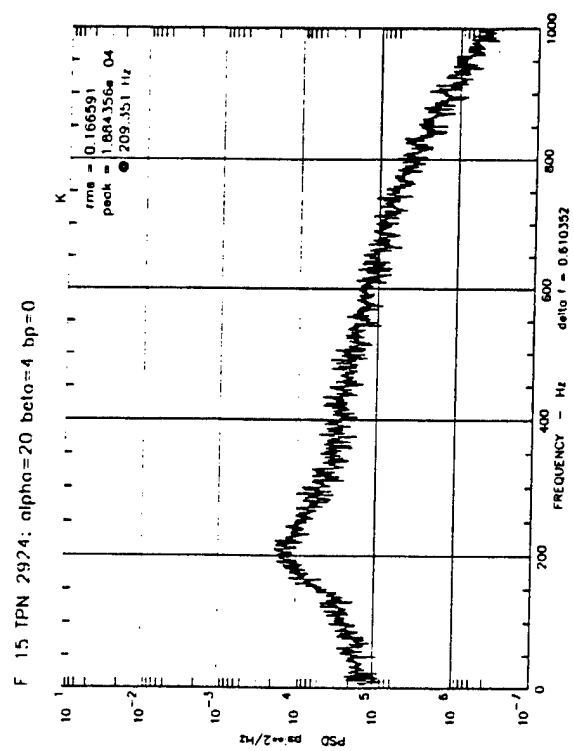
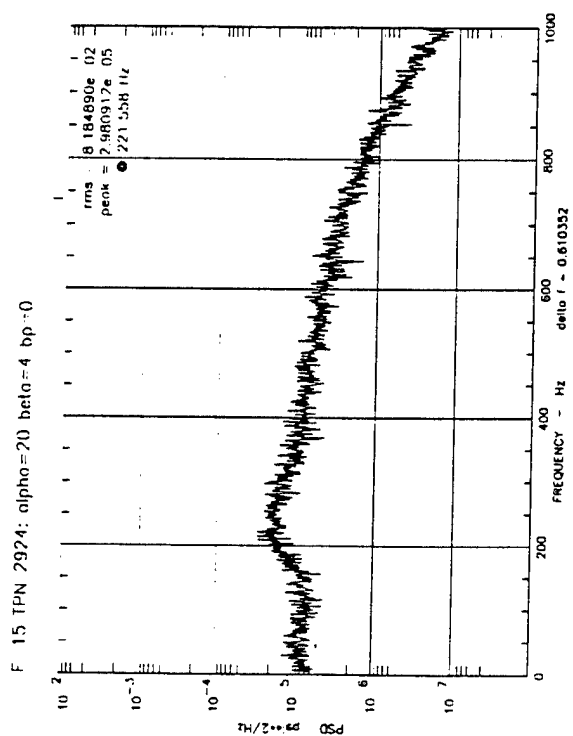
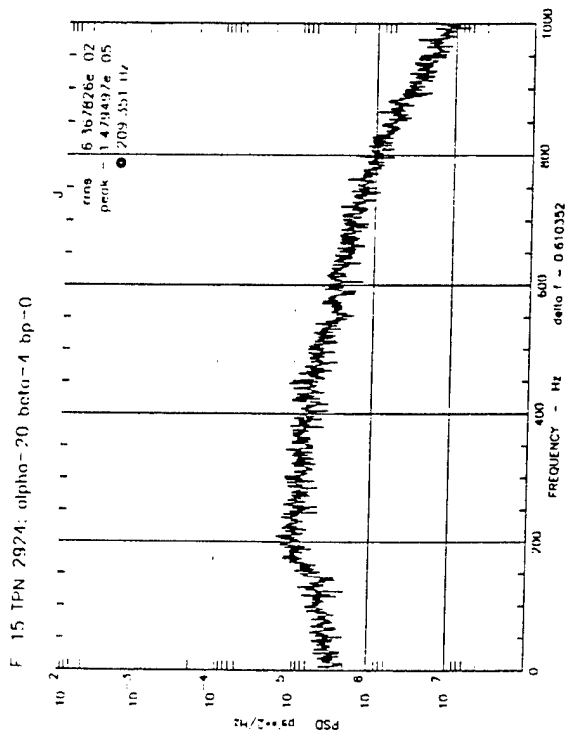


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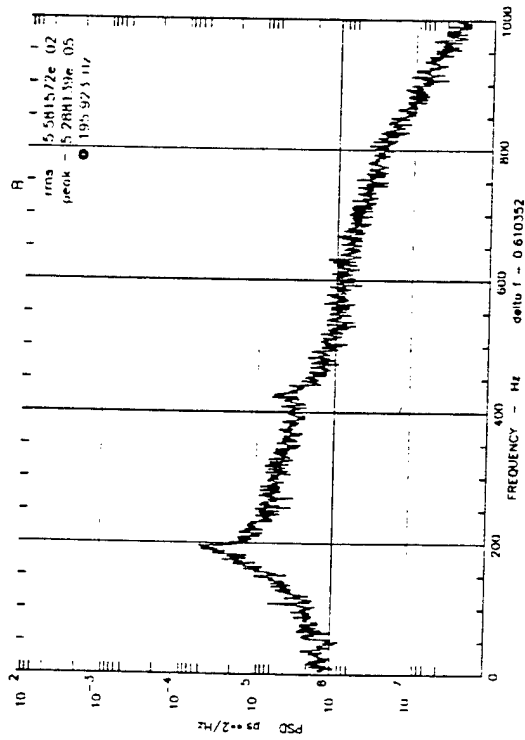


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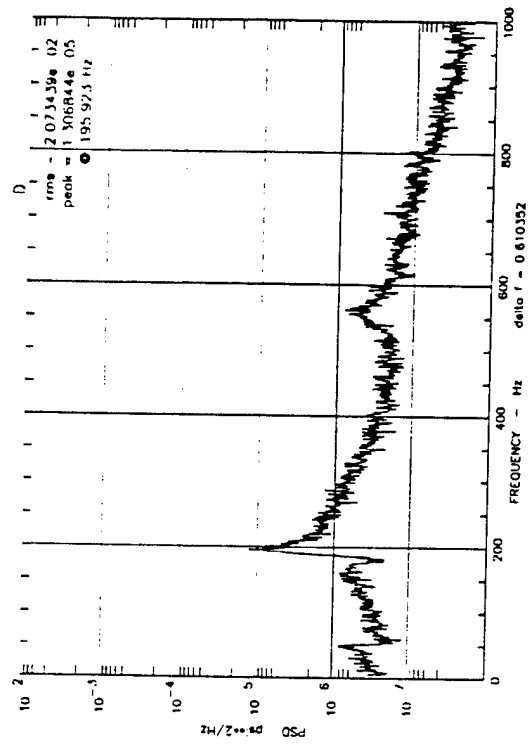




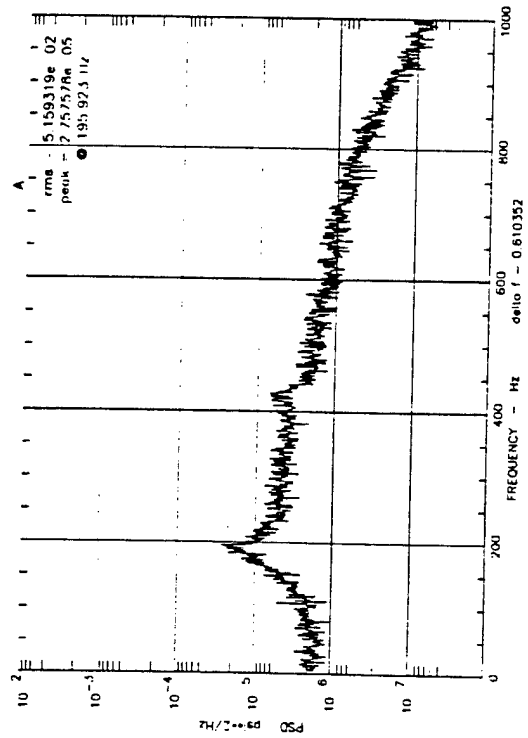
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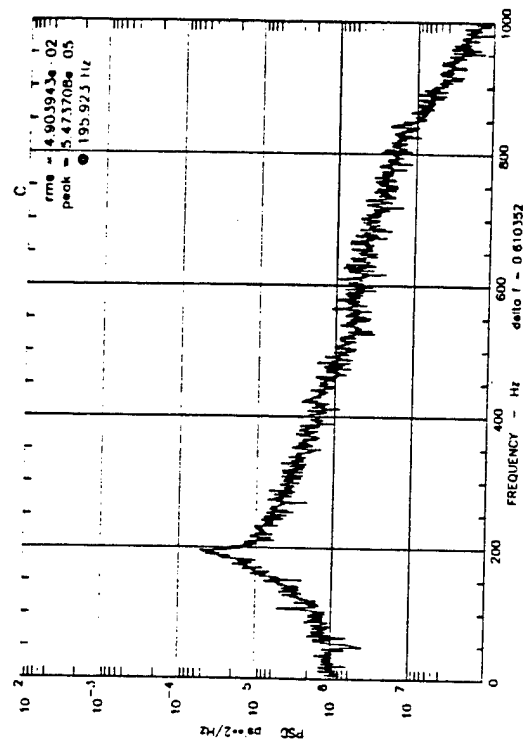
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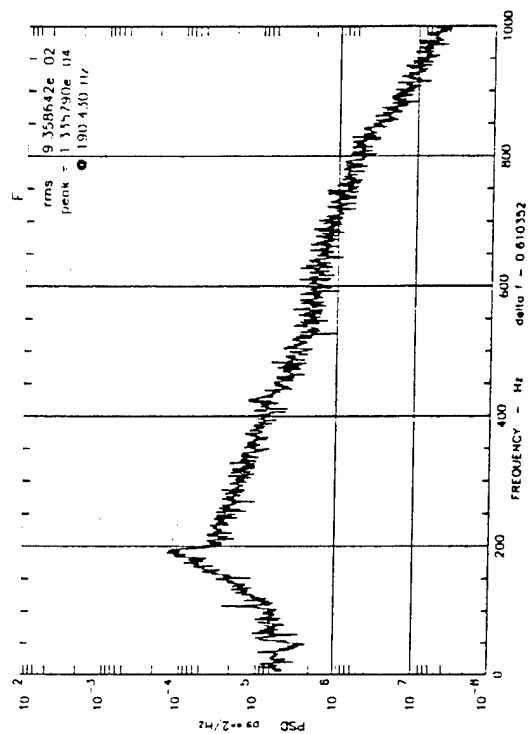
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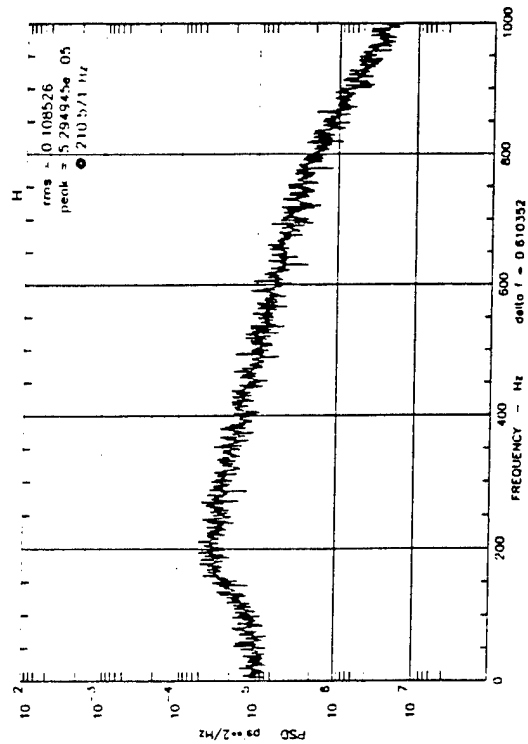
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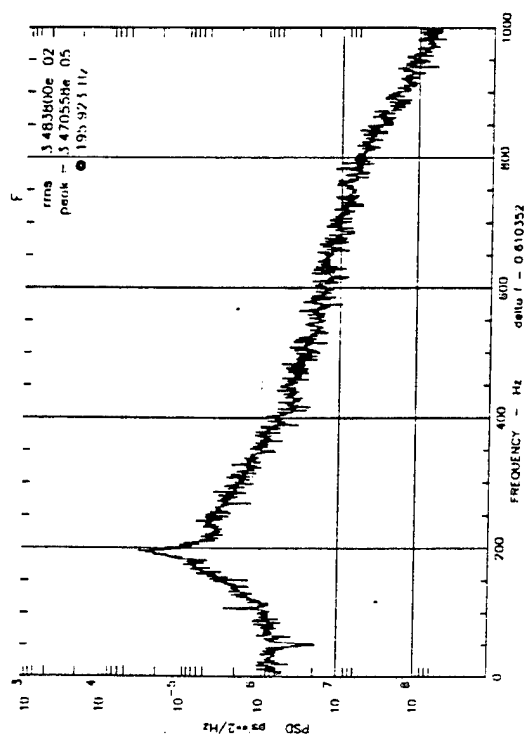
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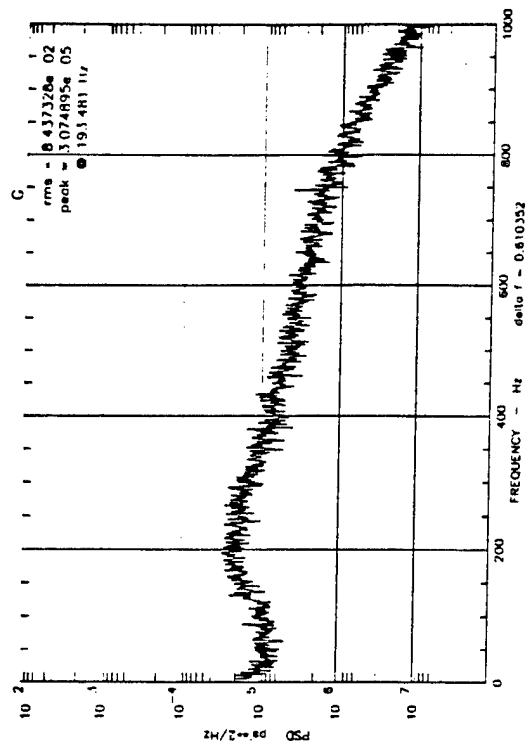
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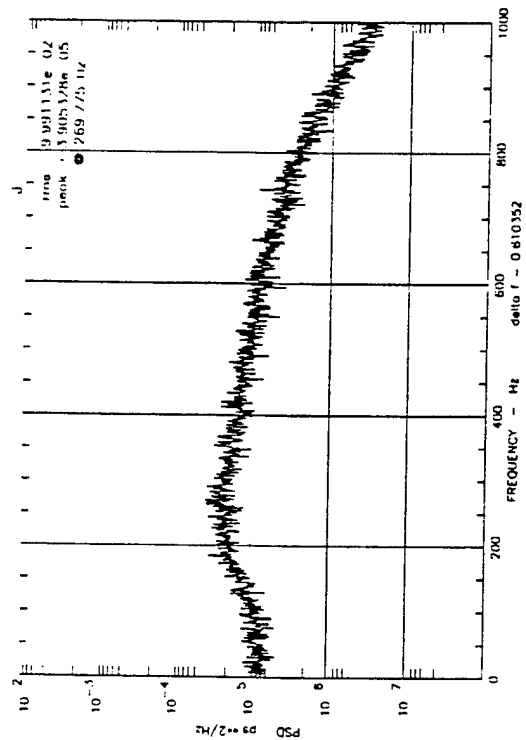
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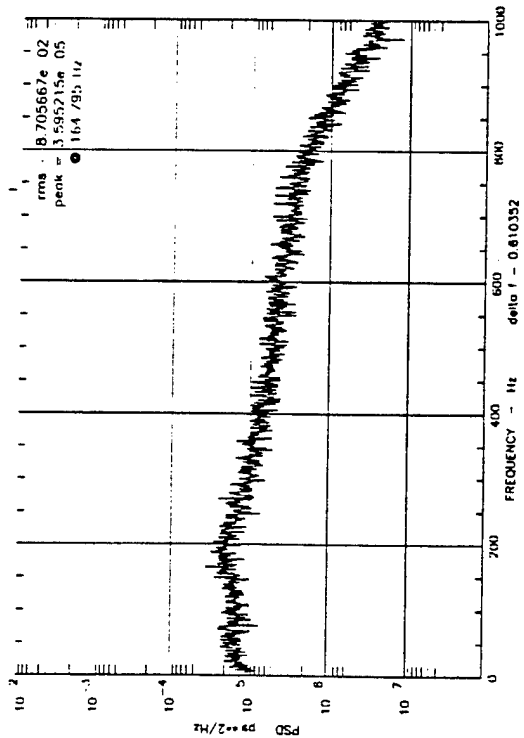
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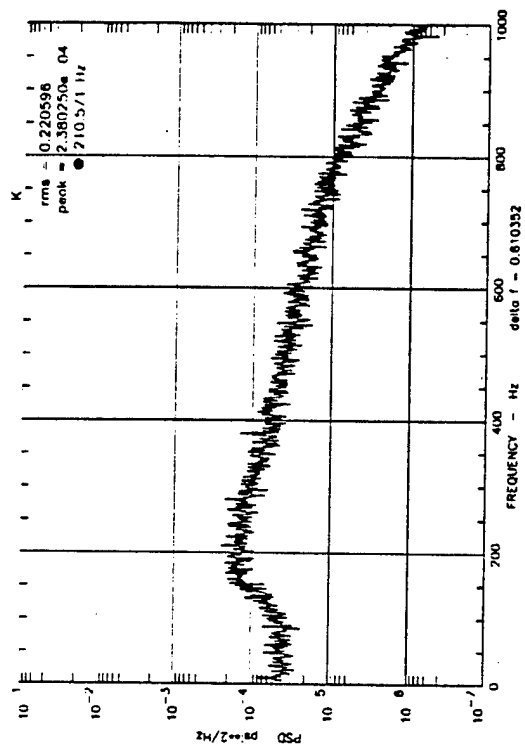
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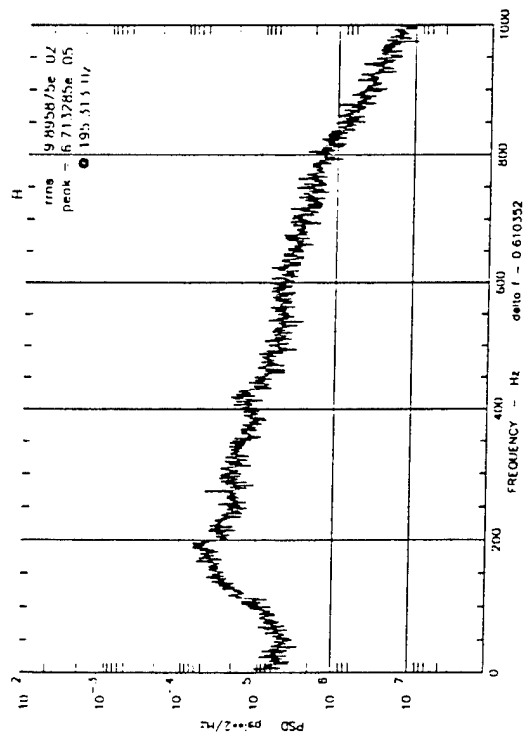


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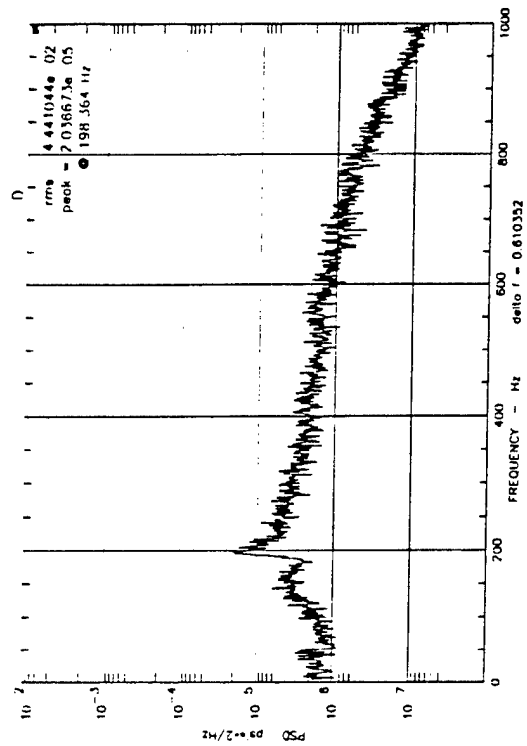




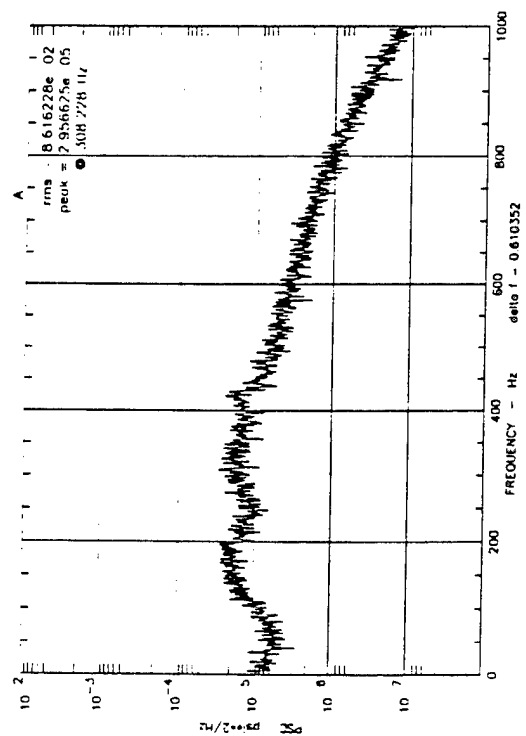
F 15 TPN 2927: alpha=28 beta=4 bp=0



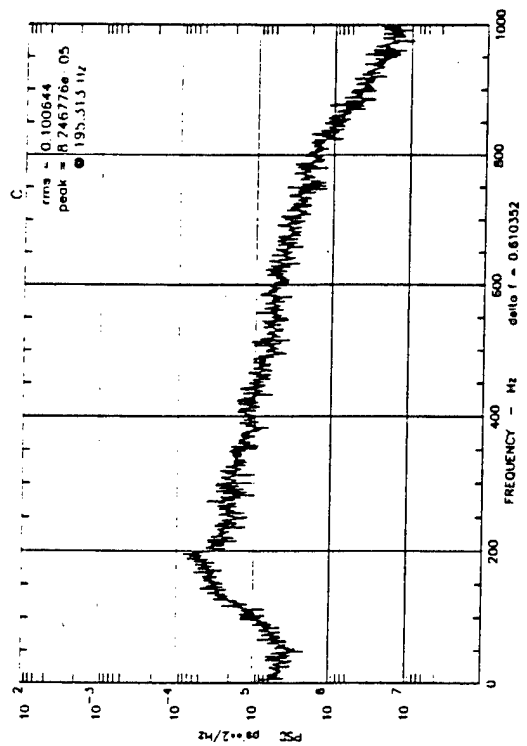
F 15 TPN 2927: alpha=28 beta=4 bp=0



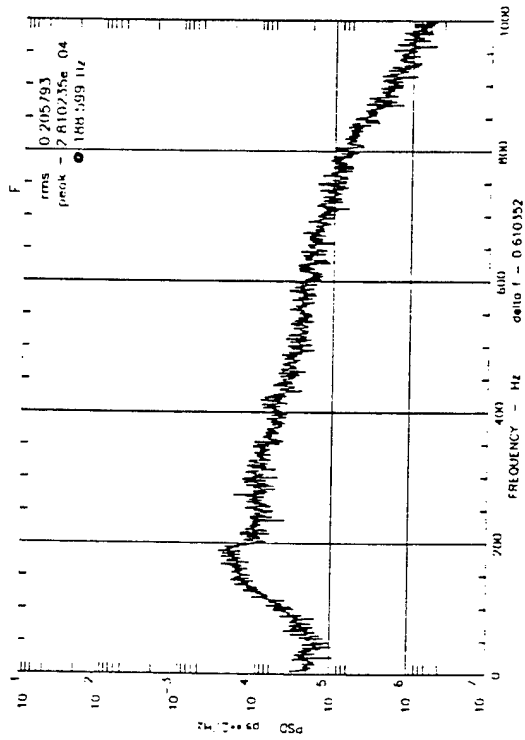
F 15 TPN 2927: alpha=28 beta=4 bp=0



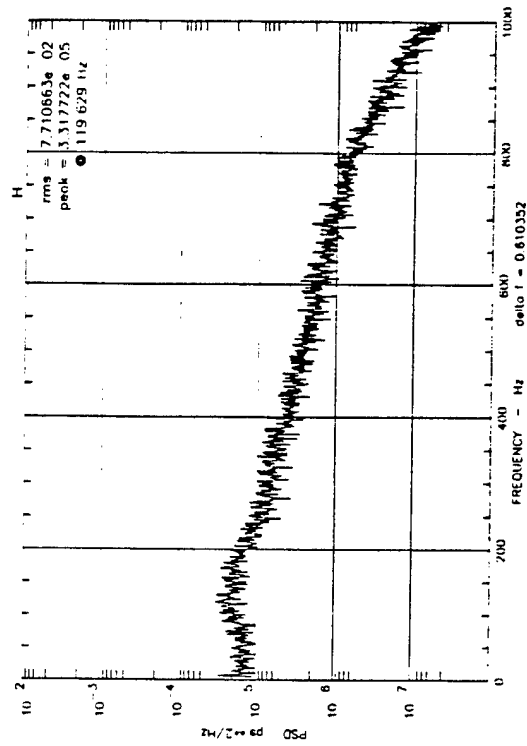
F 15 TPN 2927: alpha=28 beta=4 bp=0



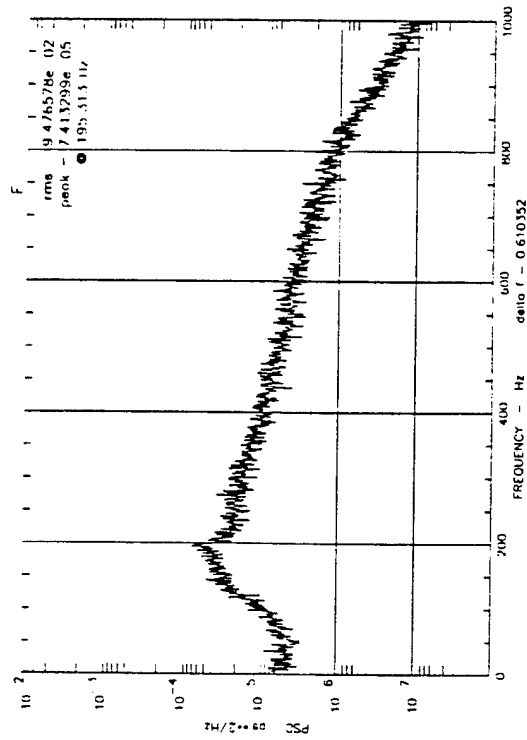
F 15 ITPN 2927; alpha=28 beta=4 bp=0



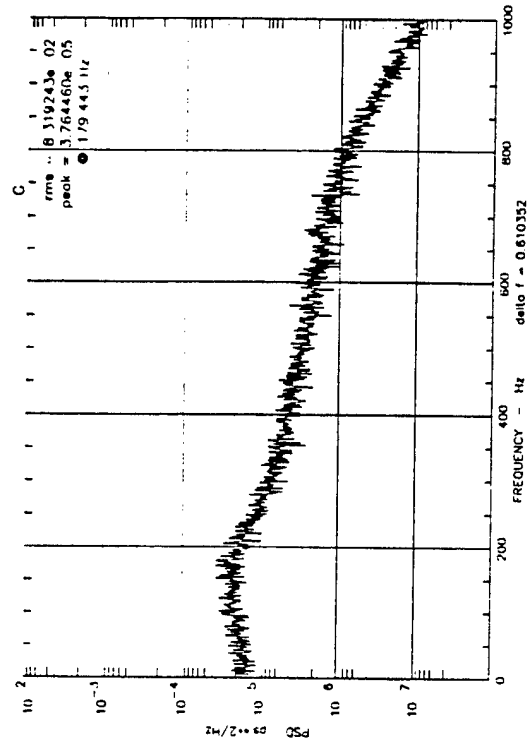
F 15 ITPN 2927; alpha=28 beta=4 bp=0

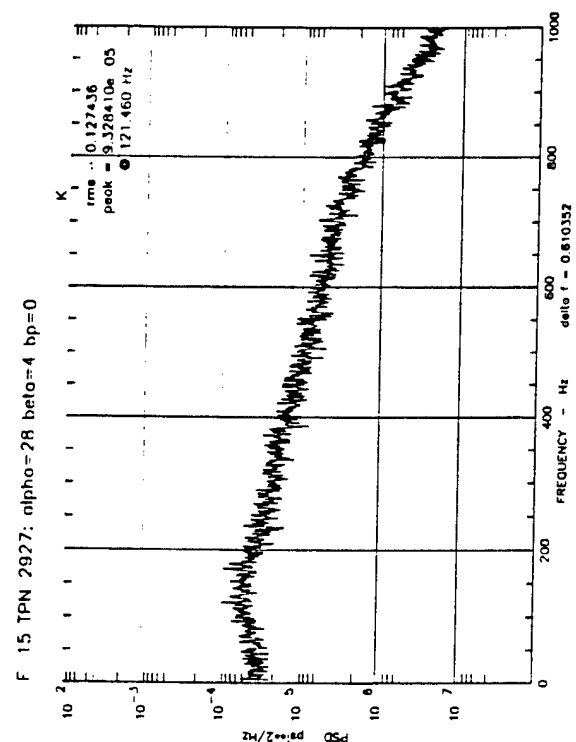
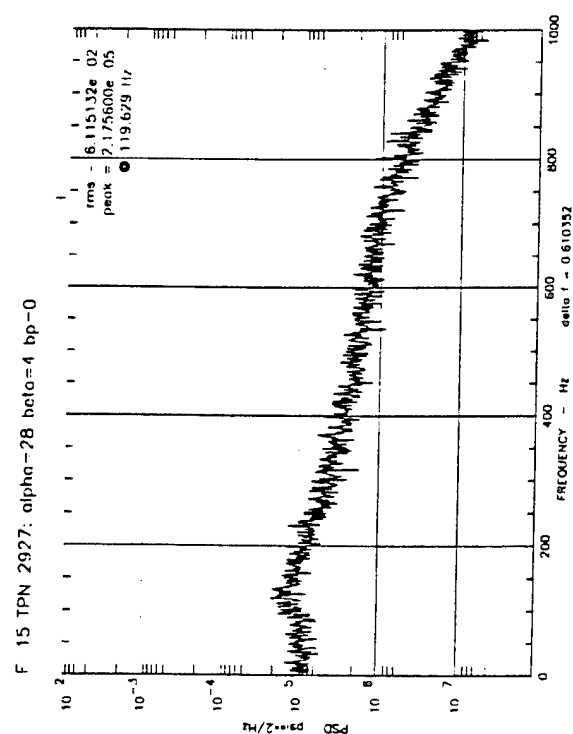
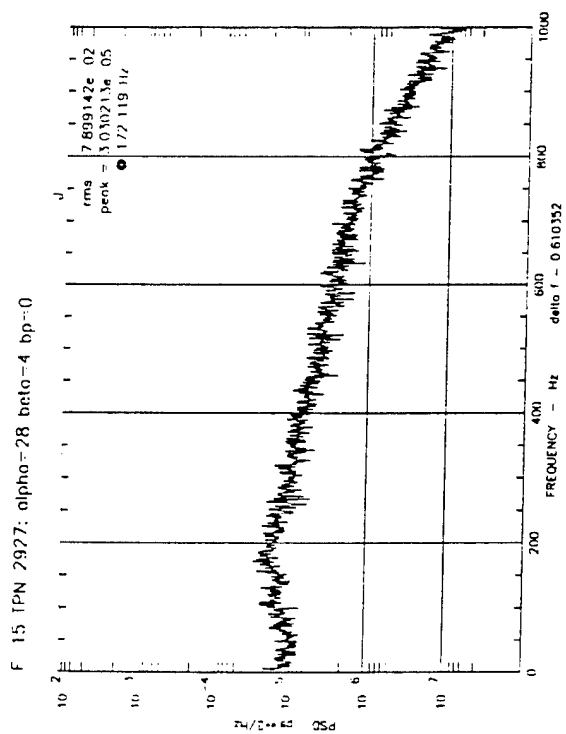


F 15 ITPN 2927; alpha=28 beta=4 bp=0

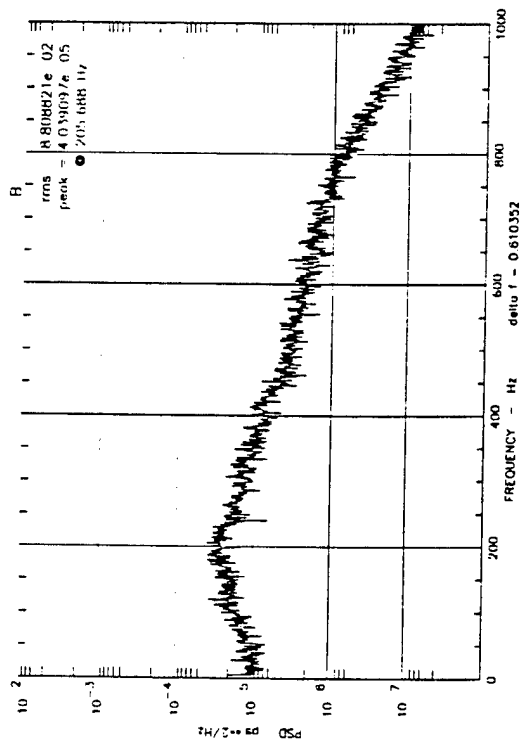


F 15 ITPN 2927; alpha=28 beta=4 bp=0

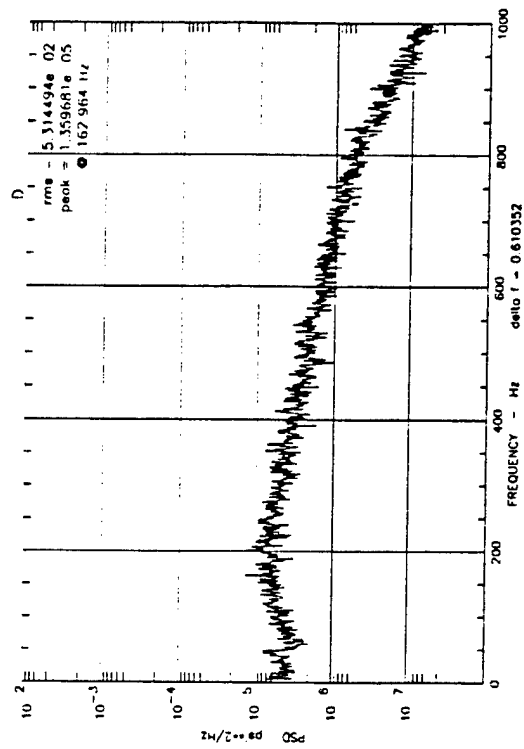




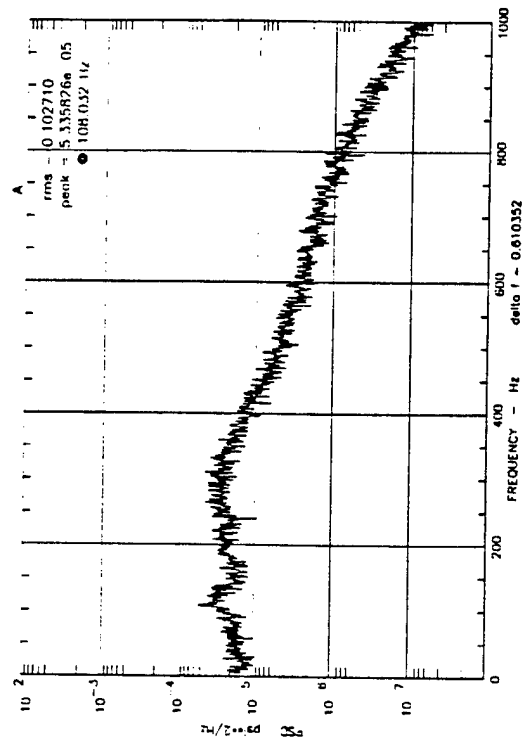
F-15 TPN 2928: alpha=32 beta=4 bp=0



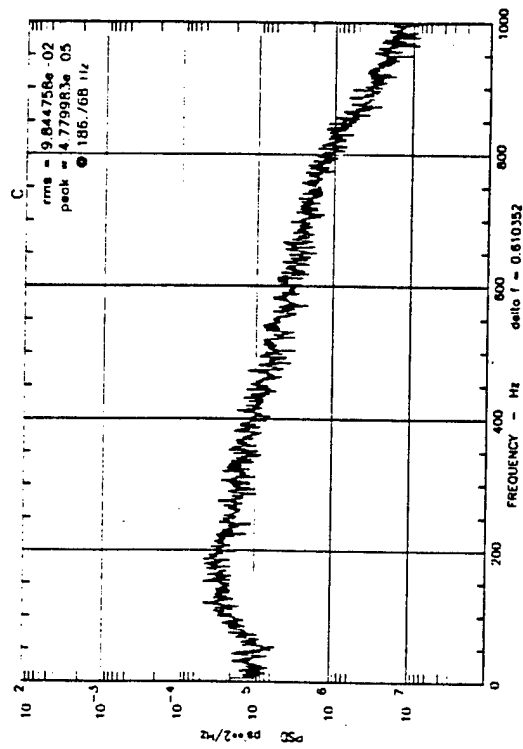
F-15 TPN 2928: alpha=32 beta=4 bp=0



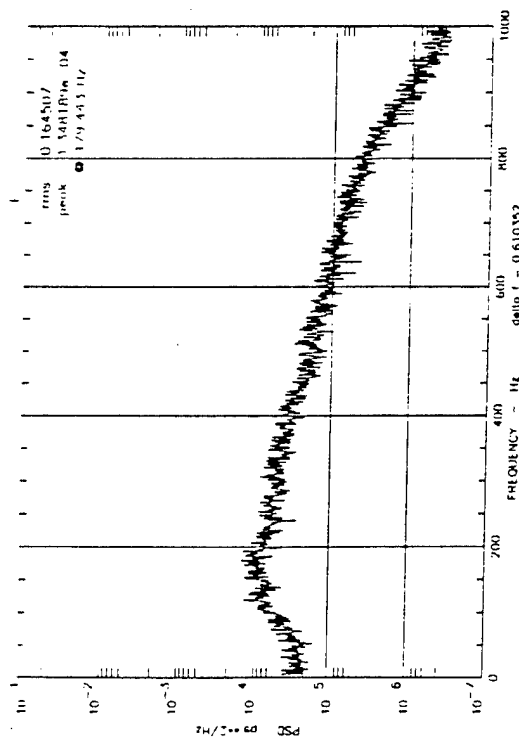
F-15 TPN 2928: alpha=32 beta=4 bp=0



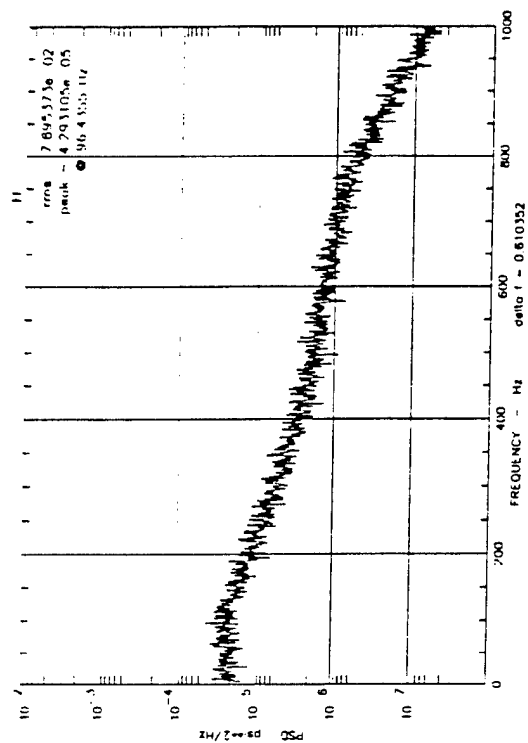
F-15 TPN 2928: alpha=32 beta=4 bp=0



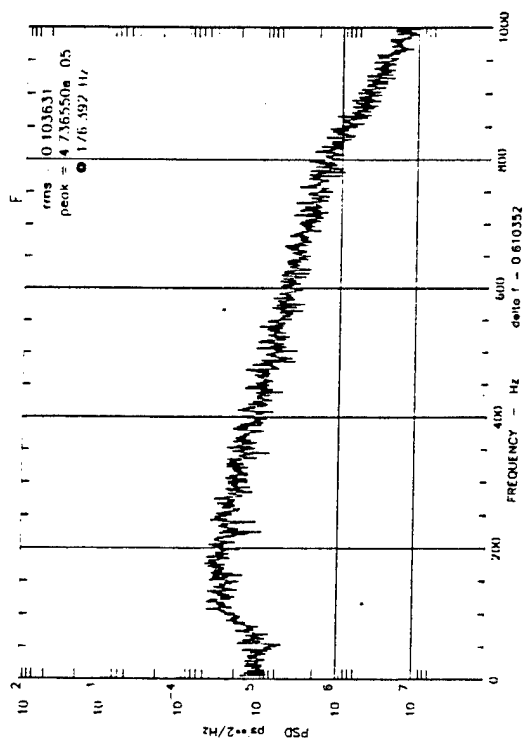
F 15 TPN 2928; alpha=32 beta=4 bp=0



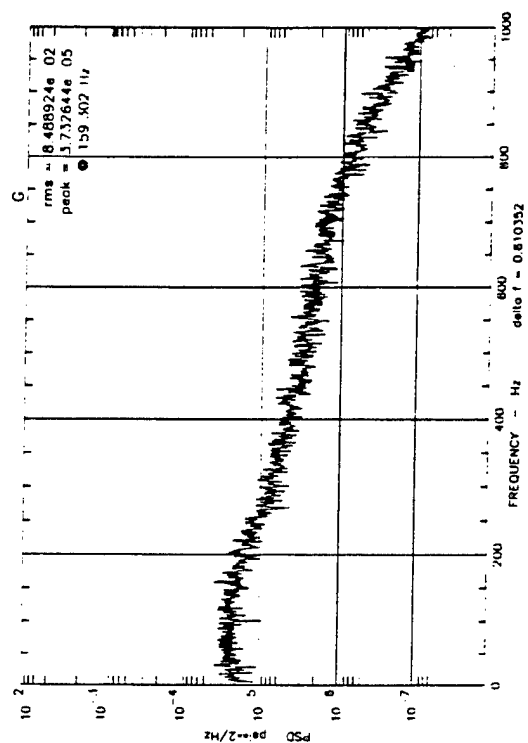
F 15 TPN 2928; alpha=32 beta=4 bp=0



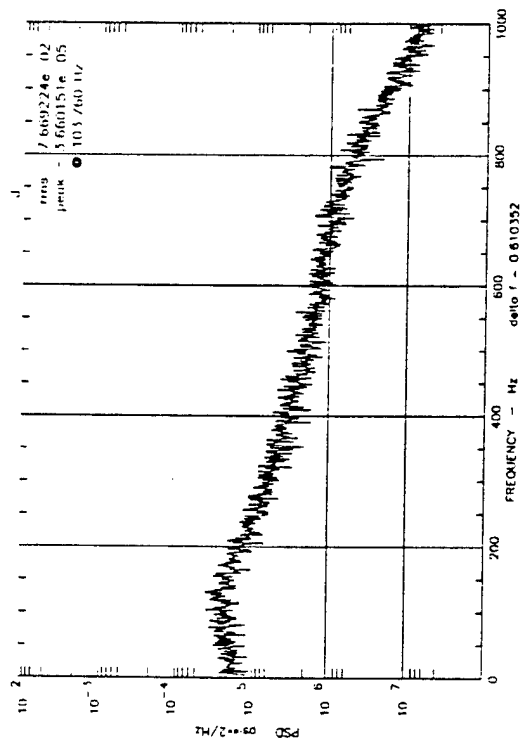
F 15 TPN 2928; alpha=32 beta=4 bp=0



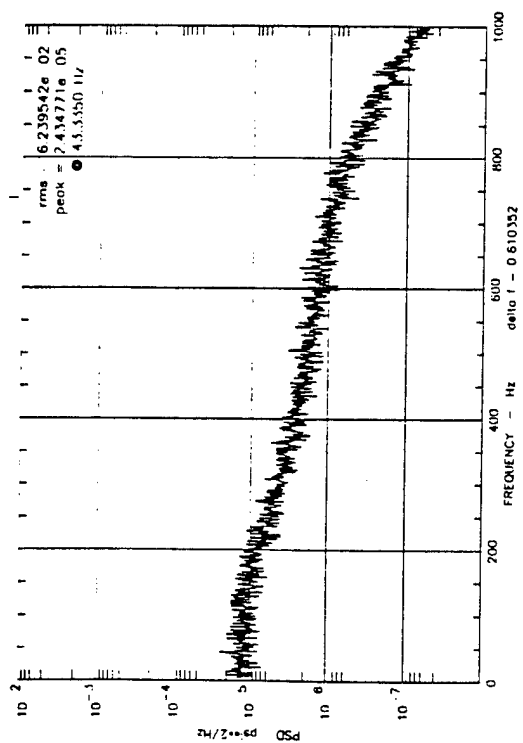
F 15 TPN 2928; alpha=32 beta=4 bp=0



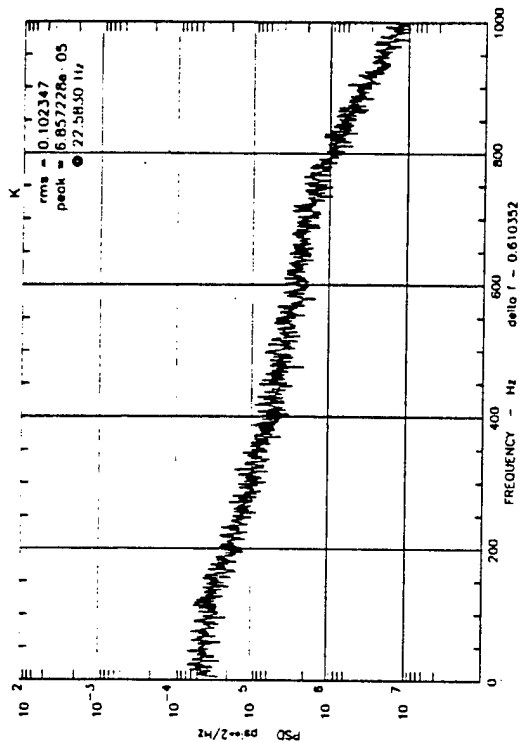
F 15 TPN 2928:  $\alpha=32$   $\beta=4$   $\beta=0$

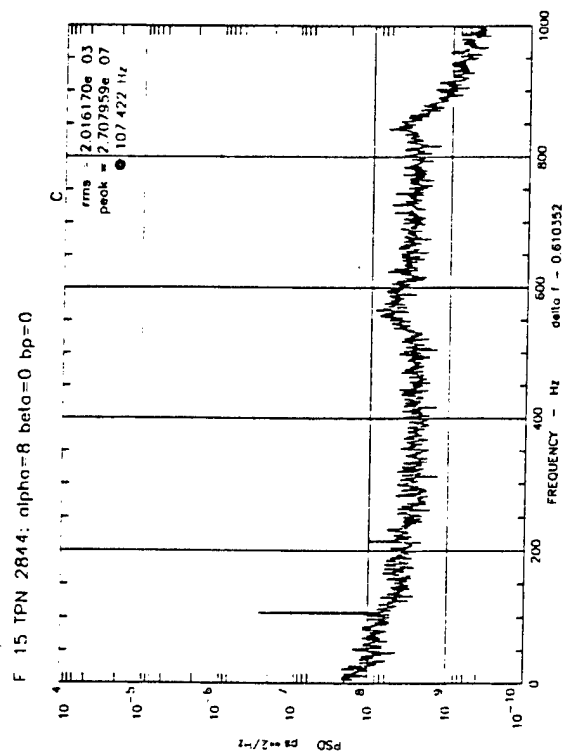
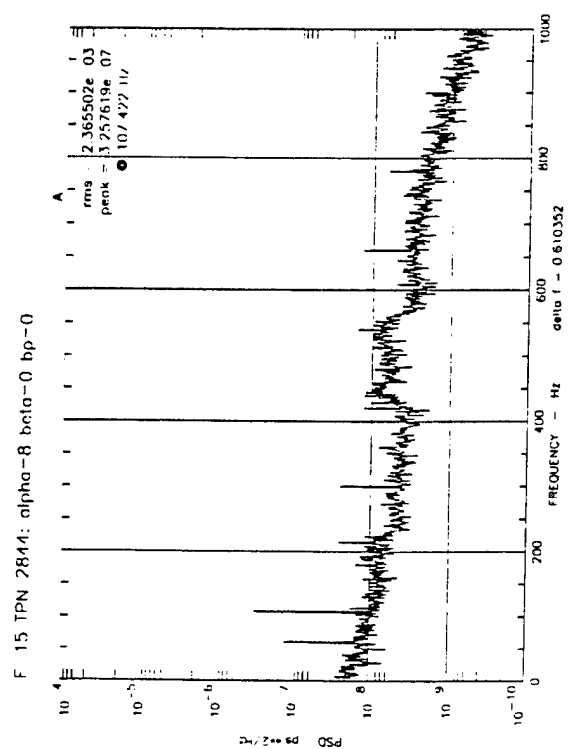
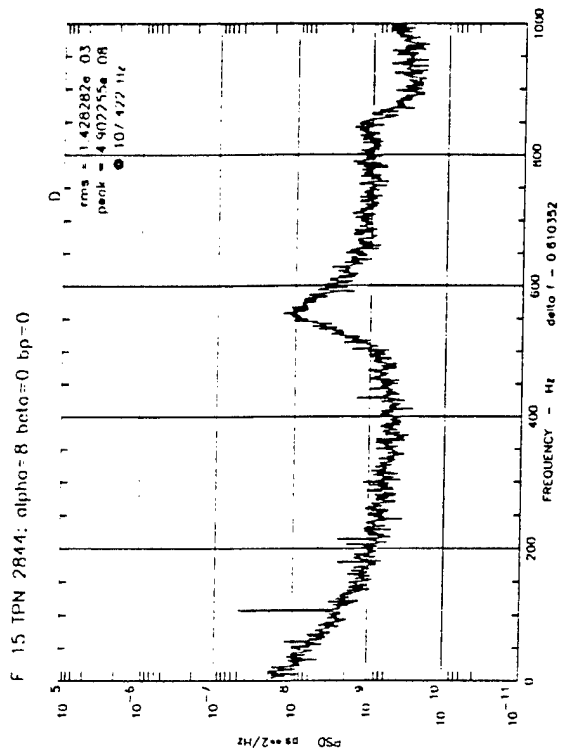
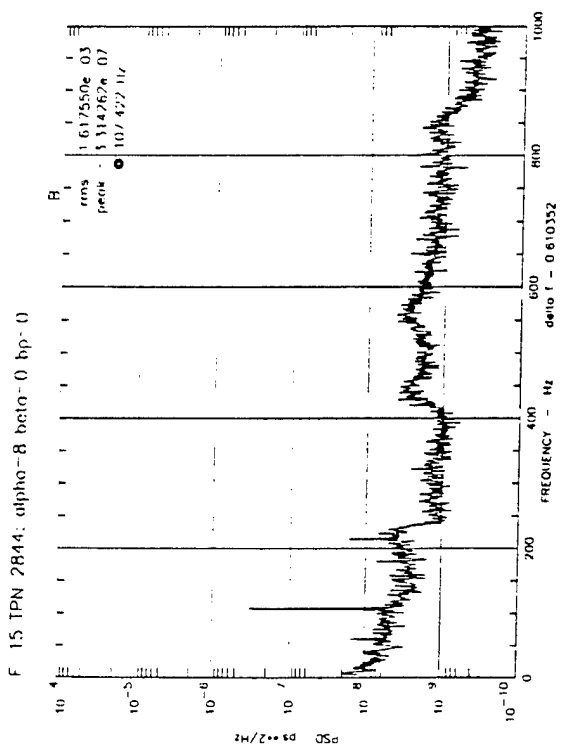


F 15 TPN 2928:  $\alpha=32$   $\beta=4$   $\beta=0$

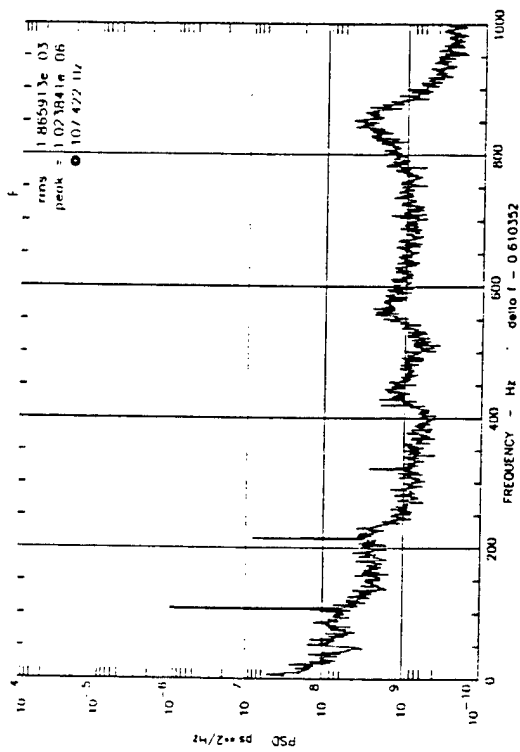


F 15 TPN 2928:  $\alpha=32$   $\beta=4$   $\beta=0$

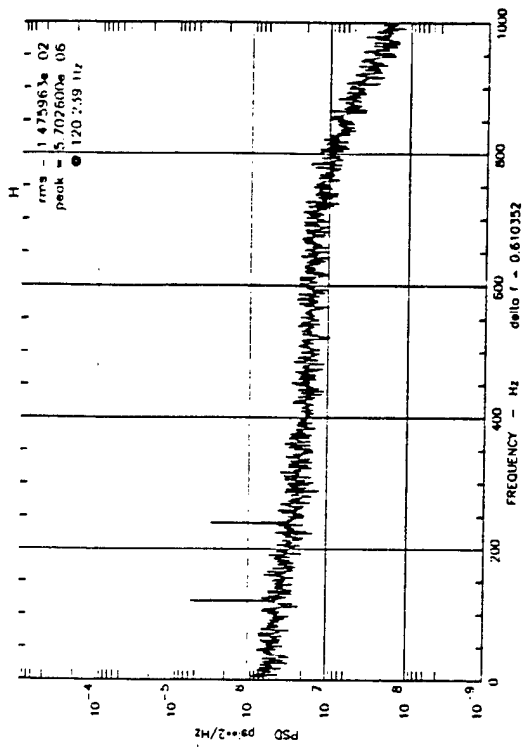




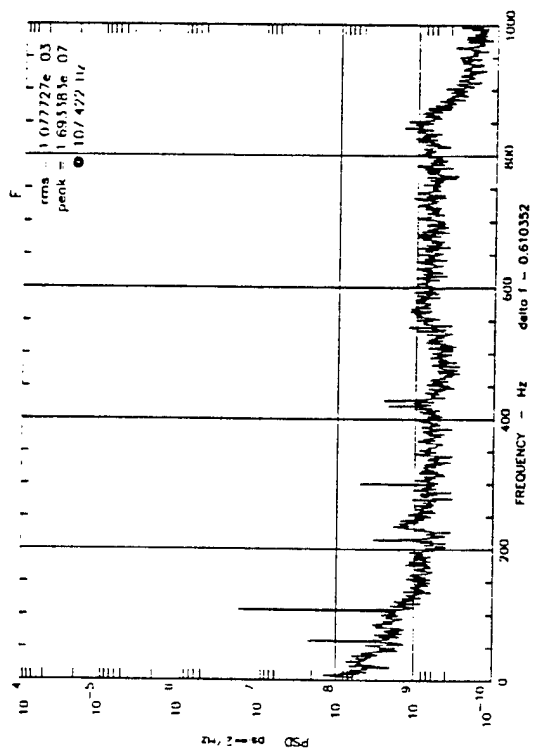
F 15 TPN 2844; alpha=8 beta=0 bp=0



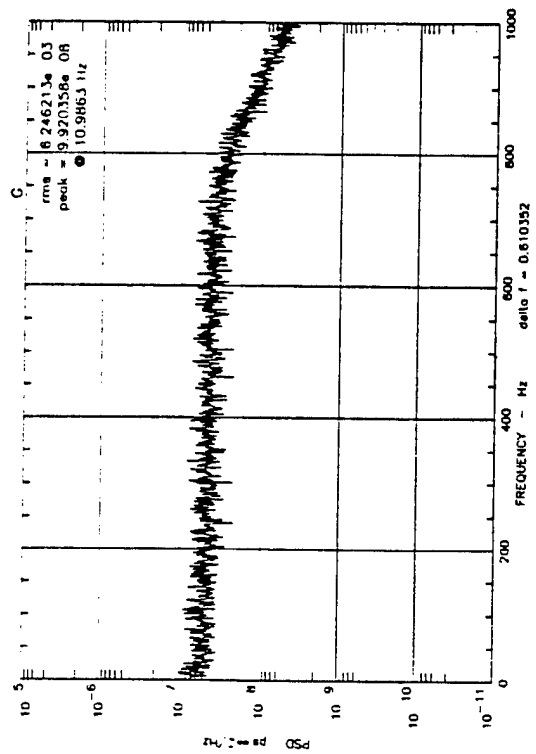
F 15 TPN 2844; alpha=8 beta=0 bp=0



F 15 TPN 2844; alpha=8 beta=0 bp=0

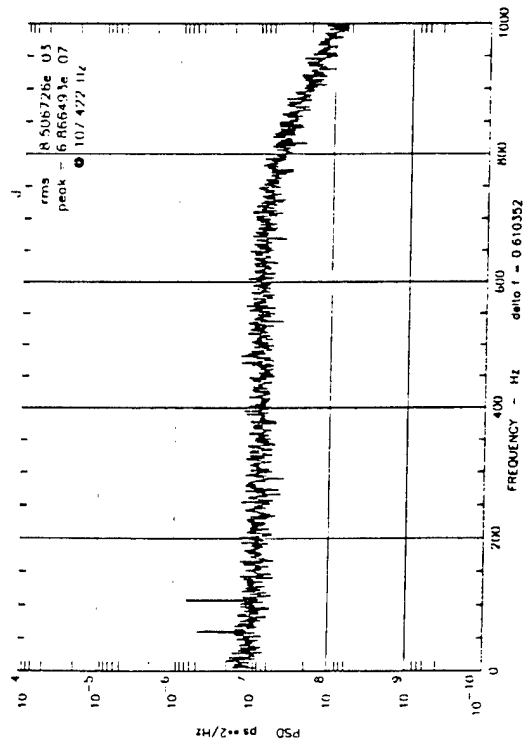


F 15 TPN 2844; alpha=8 beta=0 bp=0

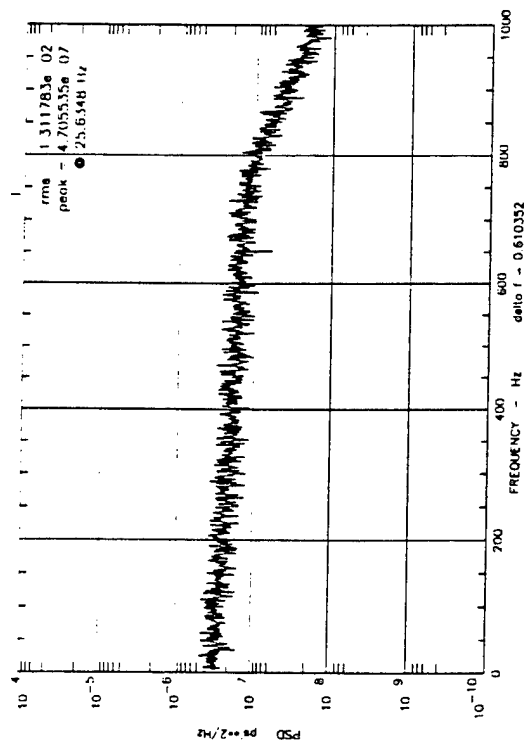




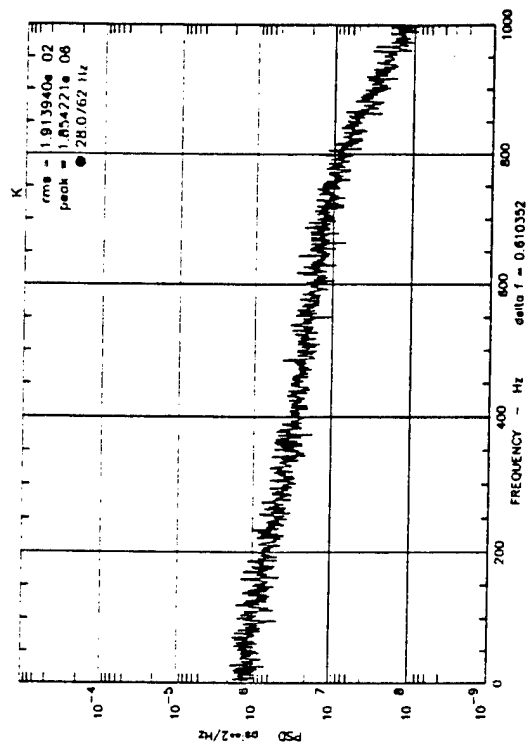
F 15 TPN 2844: alpha=8 beta=0 bp=0



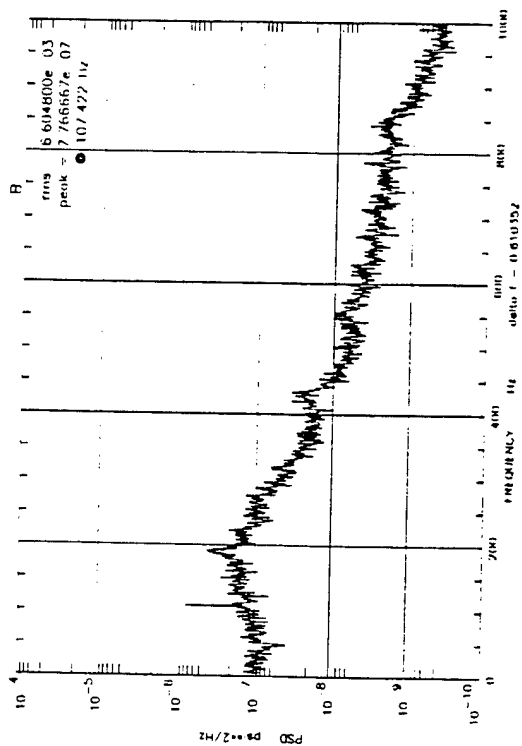
F 15 TPN 2844: alpha=8 beta=0 bp=0



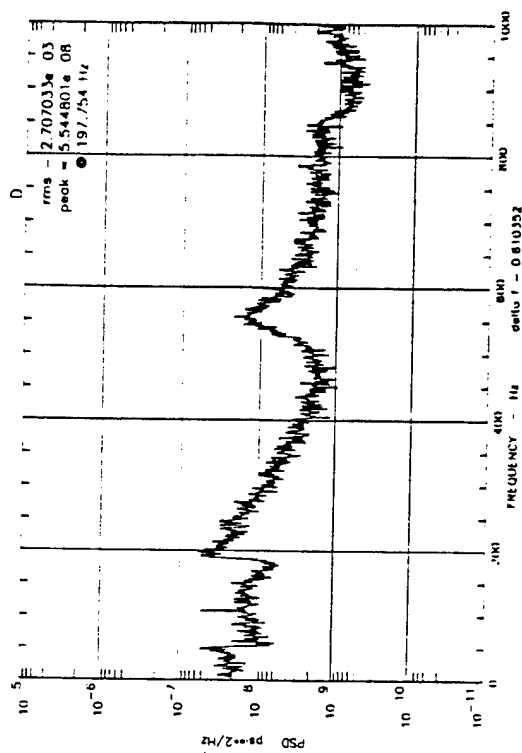
F 15 TPN 2844: alpha=8 beta=0 bp=0



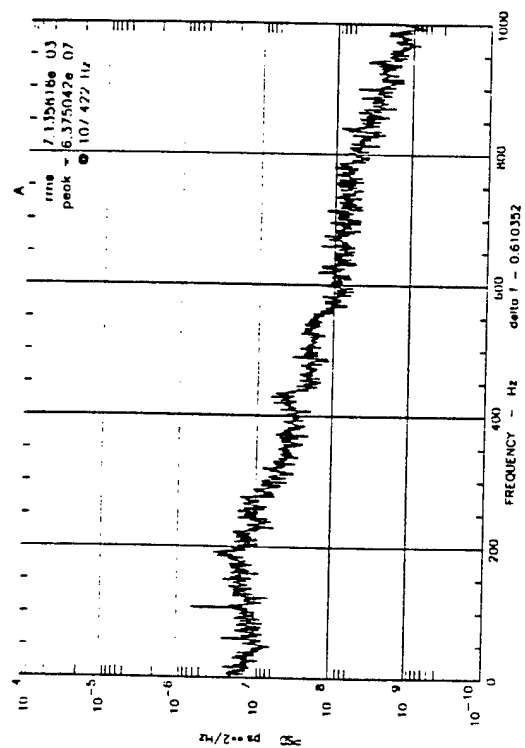
F 15 TPN 2848: alpha=16 beta=0 bp=0



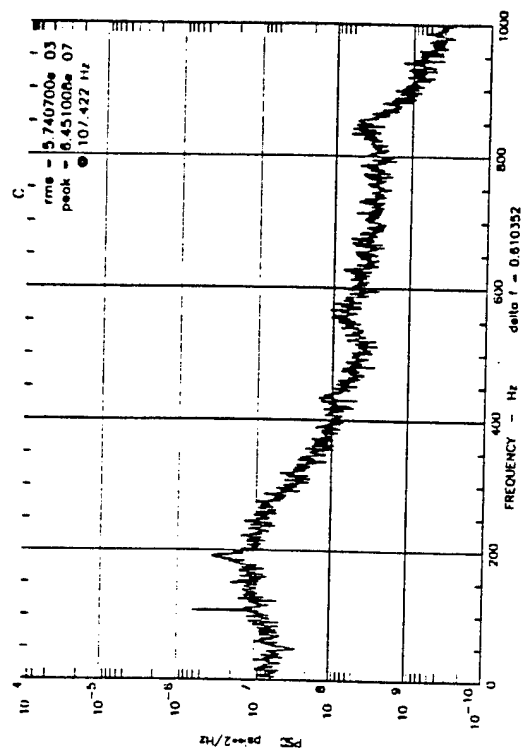
F 15 TPN 2848: alpha=16 beta=0 bp=0



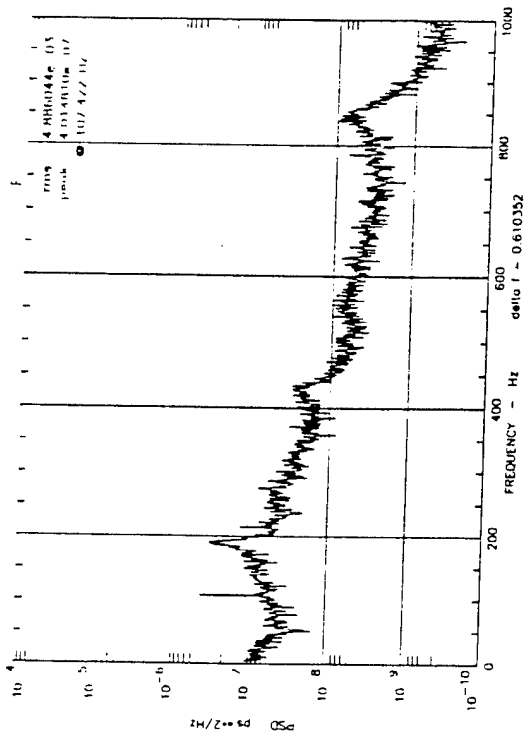
F 15 TPN 2848: alpha=16 beta=0 bp=0



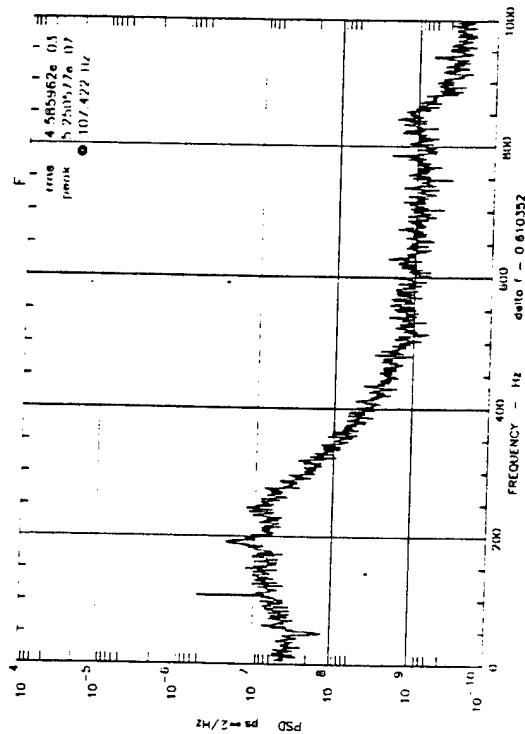
F 15 TPN 2848: alpha=16 beta=0 bp=0



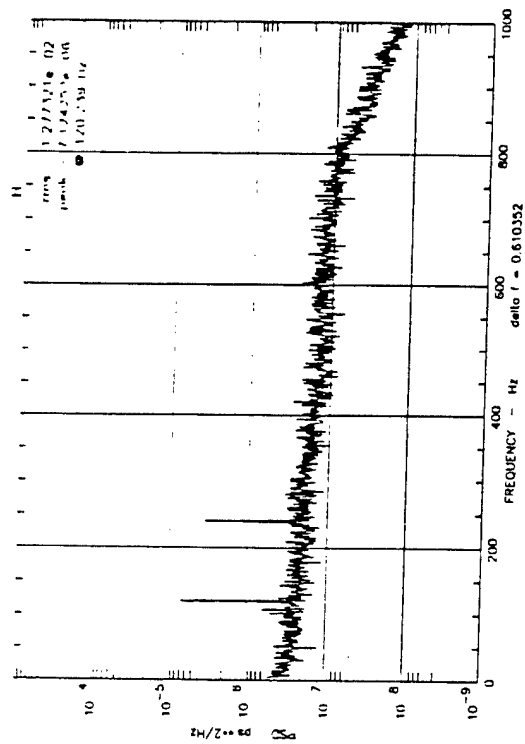
F 15 TPN 2848; alpha=16 beta=0 bp=0



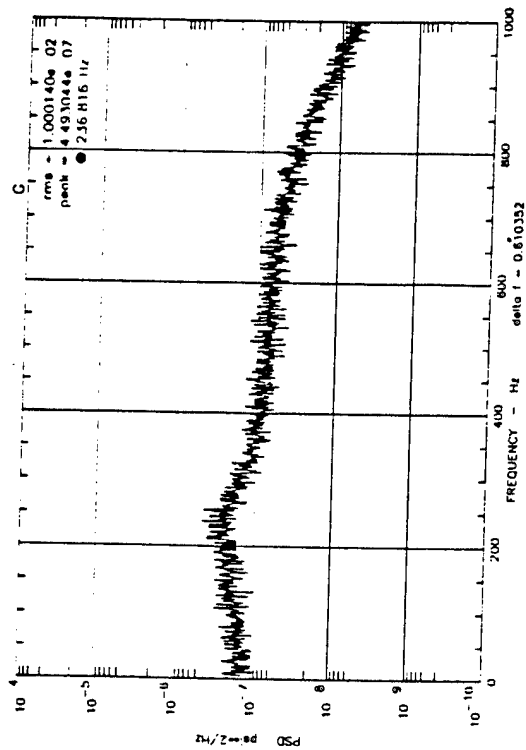
F 15 TPN 2848; alpha=16 beta=0 bp=0

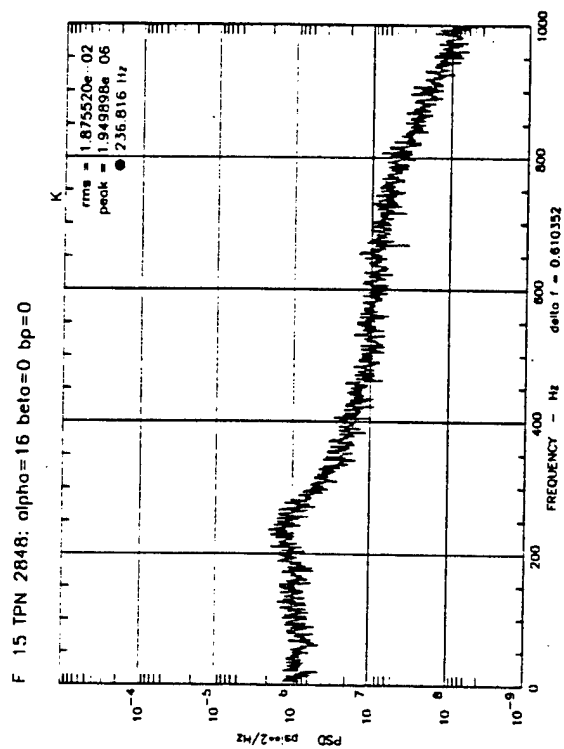
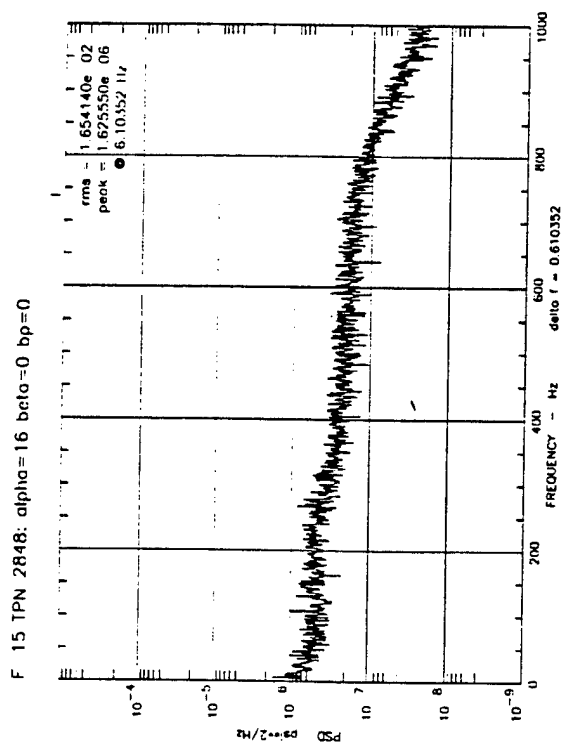
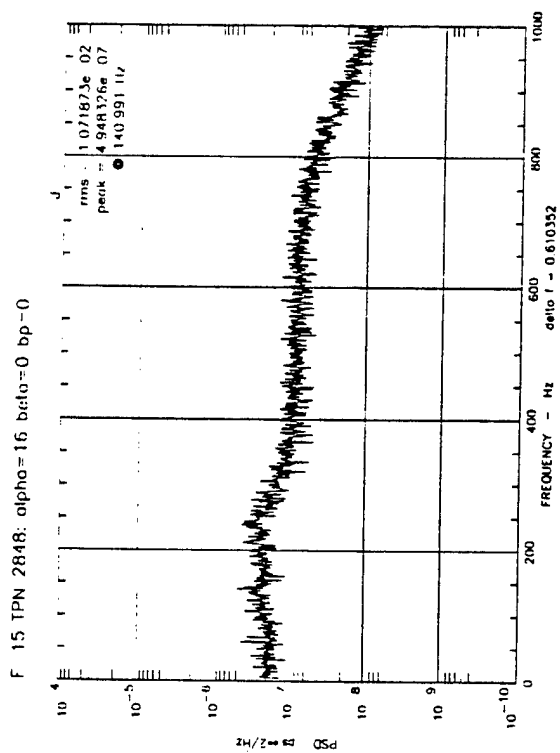


F 15 TPN 2848; alpha=16 beta=0 bp=0

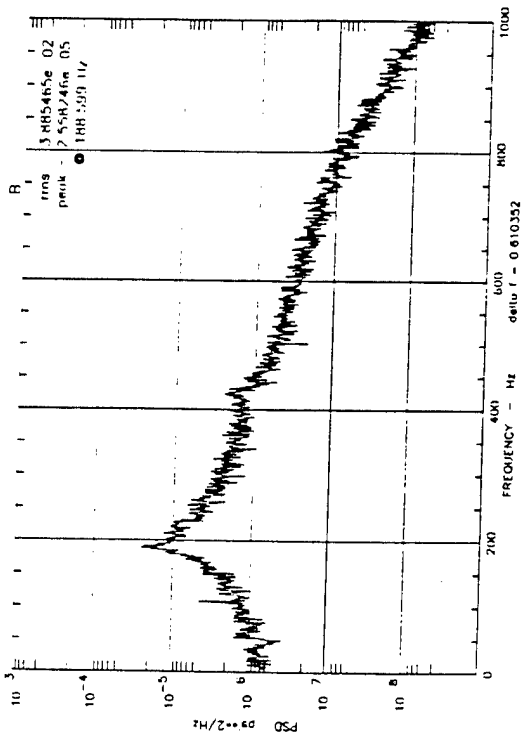


F 15 TPN 2848; alpha=16 beta=0 bp=0

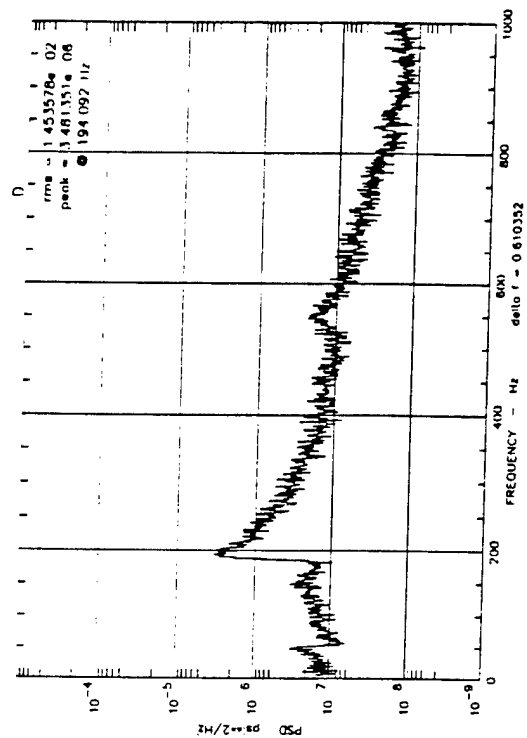




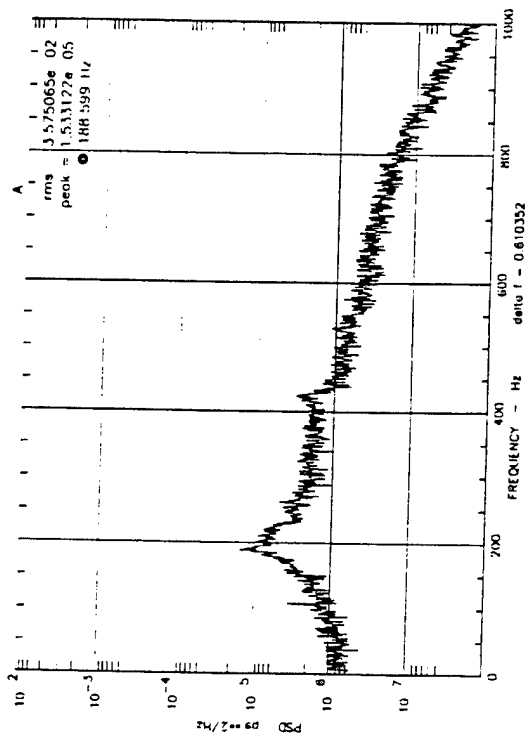
F 15 TPN 2850: alpha=20 beta=0 bp=0



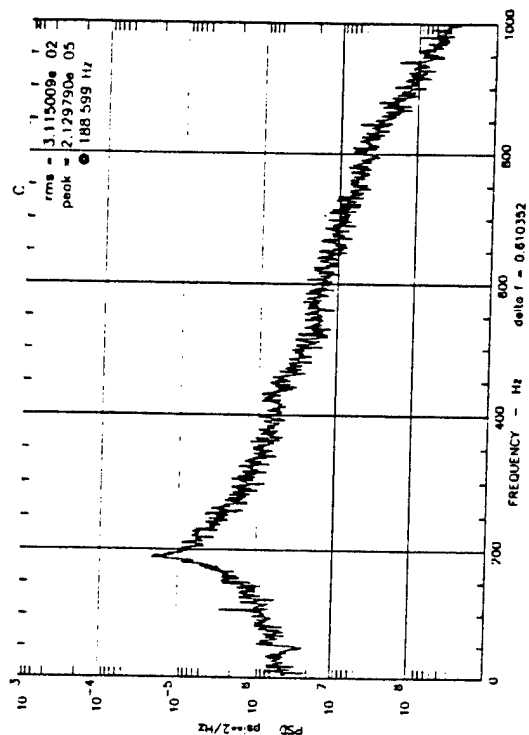
F 15 TPN 2850: alpha=20 beta=0 bp=0

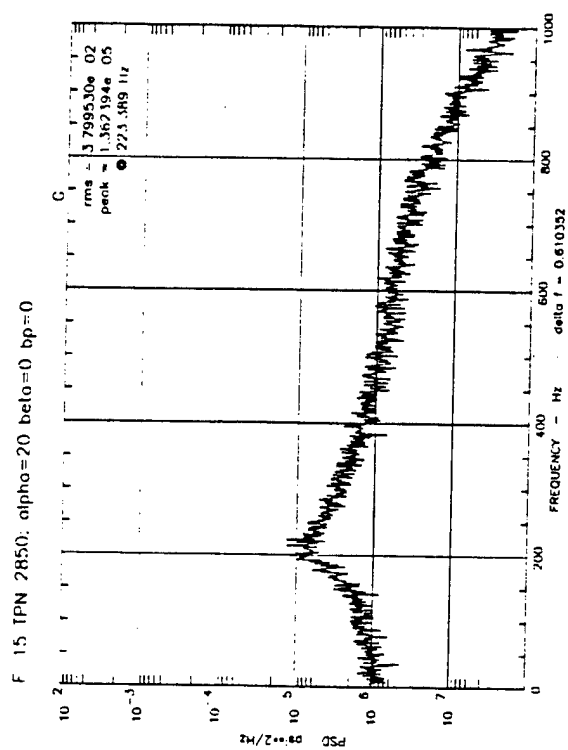
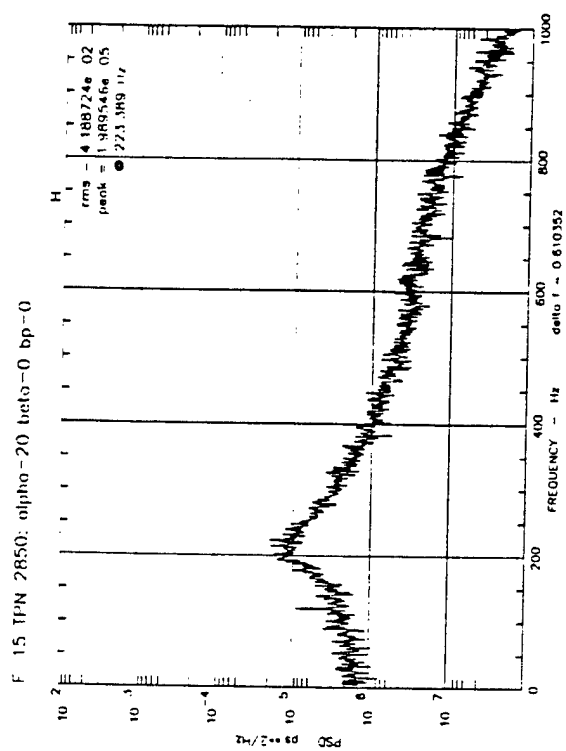
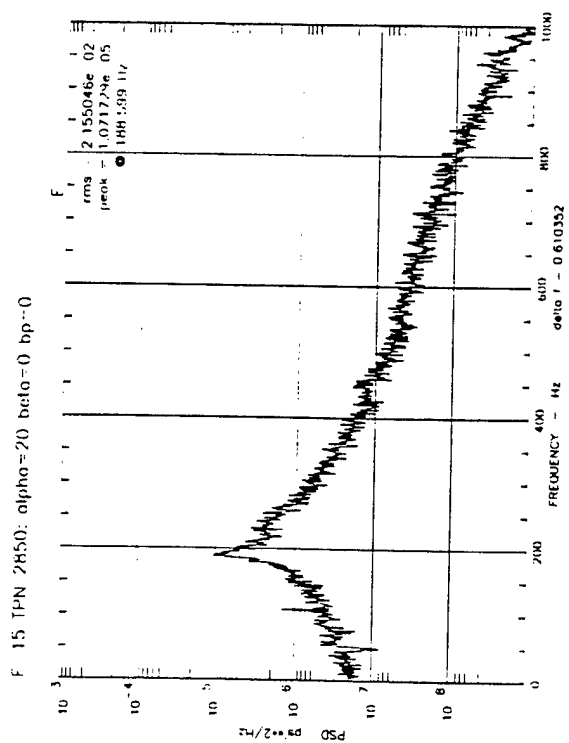
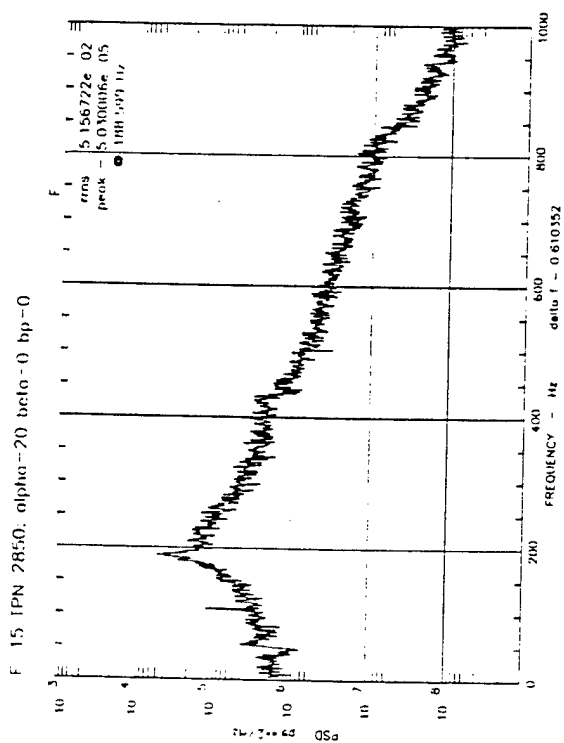


F 15 TPN 2850: alpha=20 beta=0 bp=0

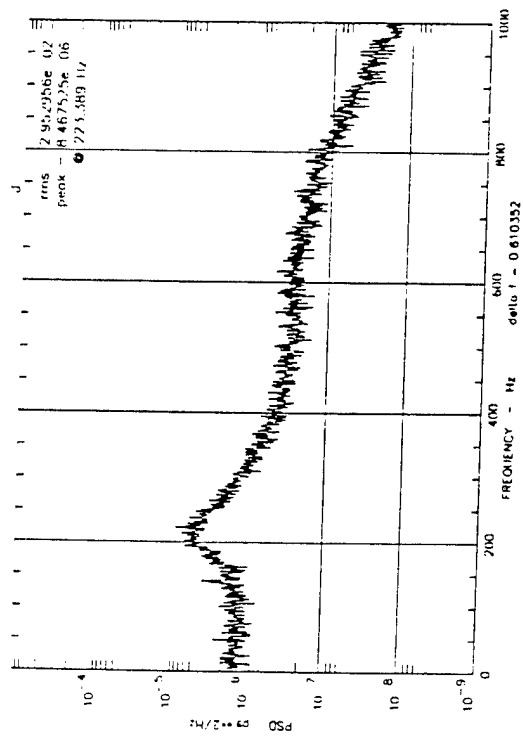


F 15 TPN 2850: alpha=20 beta=0 bp=0

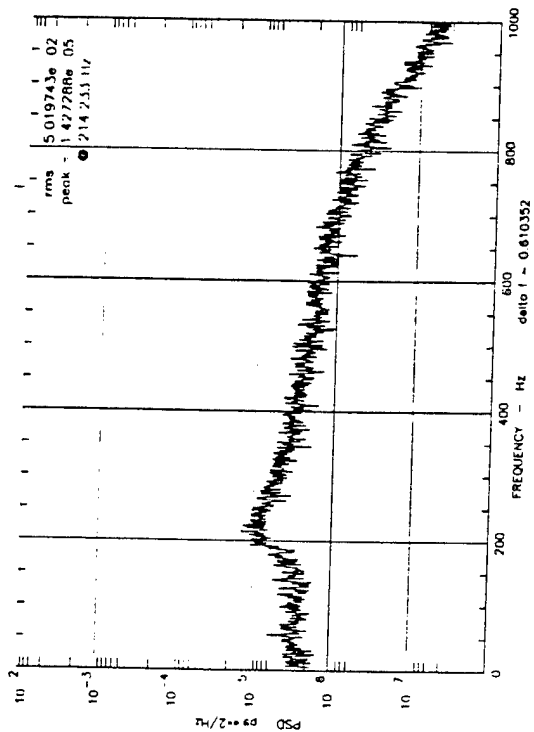




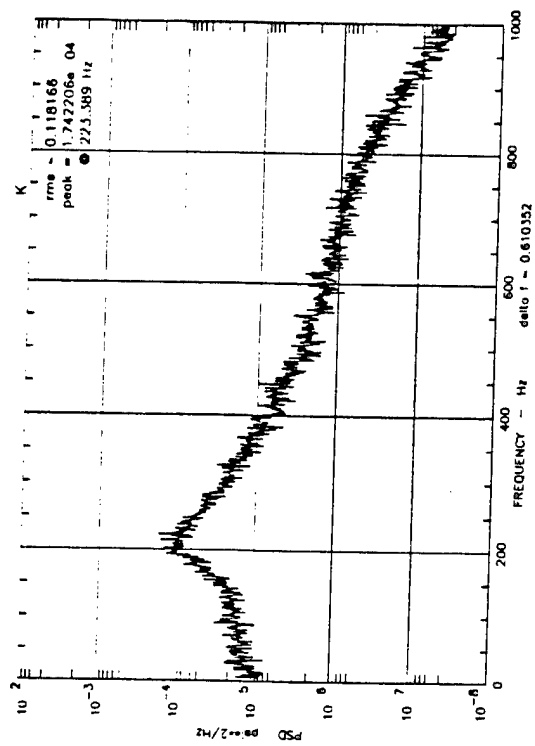
F 15 TPN 2850; alpha=20 beta=0 bp=0



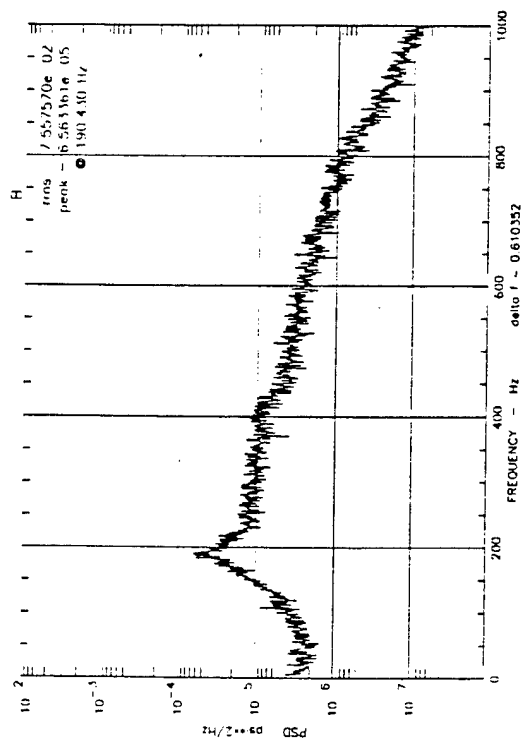
F 15 TPN 2850; alpha=20 beta=0 bp=0



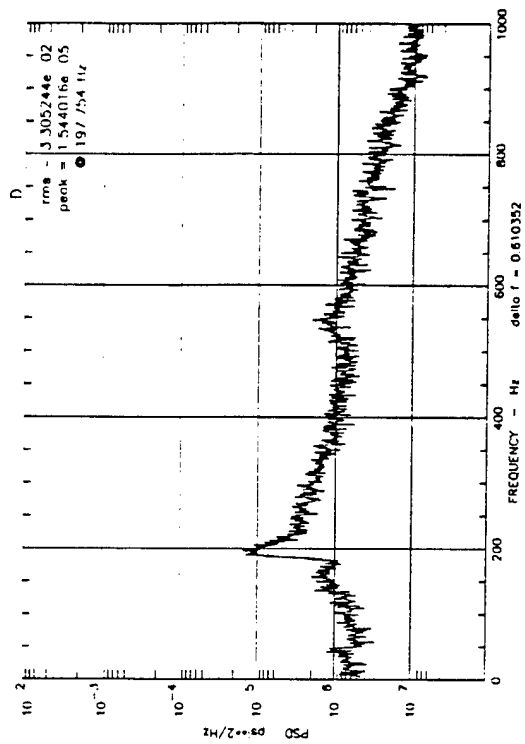
F 15 TPN 2850; alpha=20 beta=0 bp=0



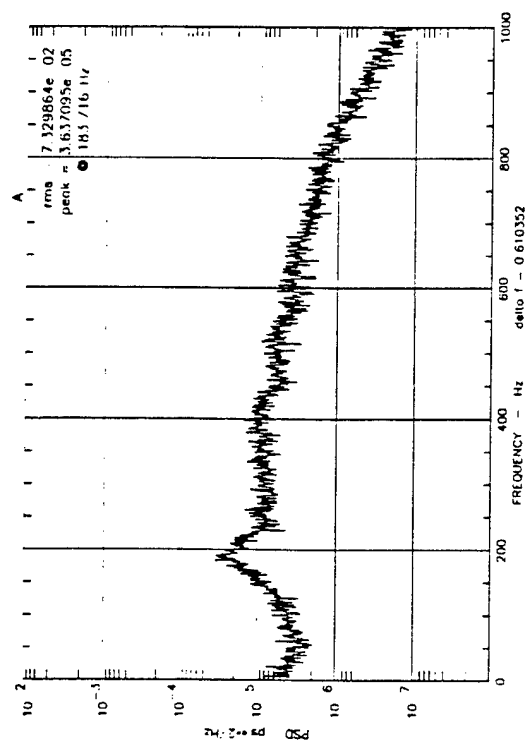
F 15 TPN 2852: alpha=24 beta=0 bp=0



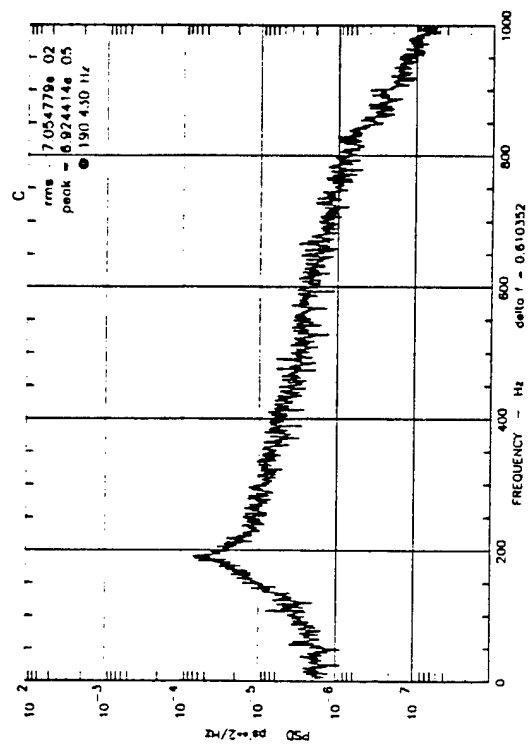
F 15 TPN 2852: alpha=24 beta=0 bp=0



F 15 TPN 2852: alpha=24 beta=0 bp=0

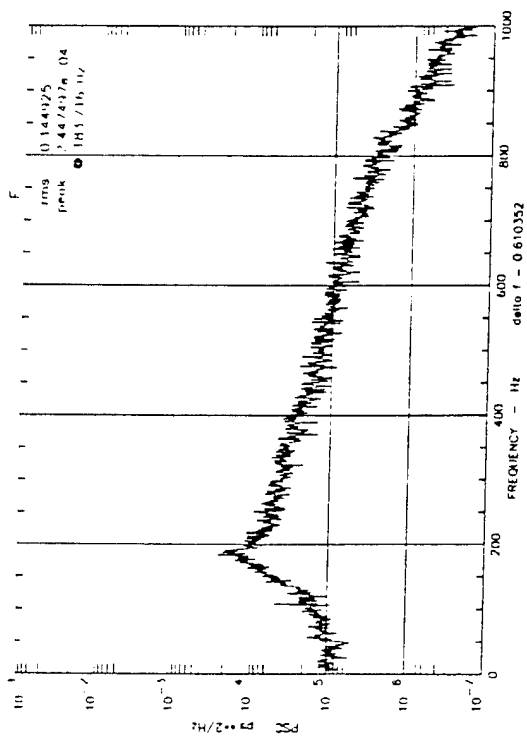


F 15 TPN 2852: alpha=24 beta=0 bp=0

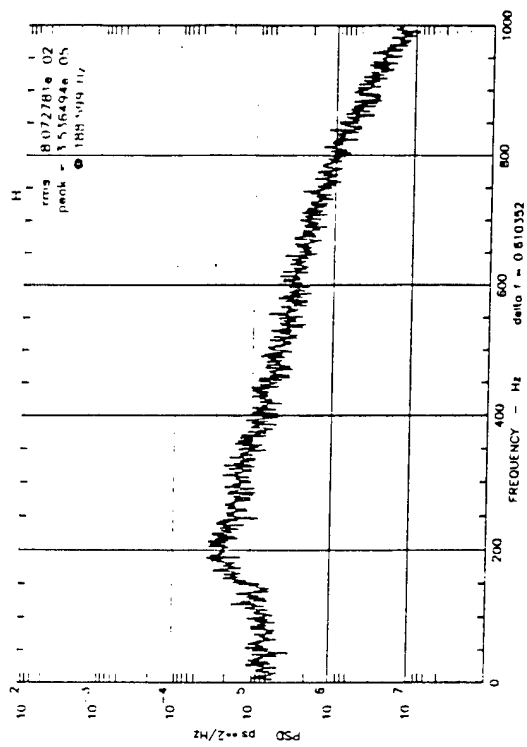




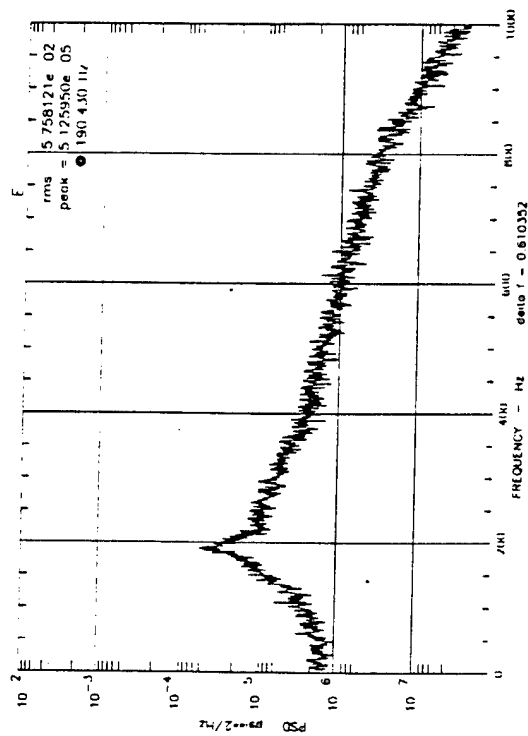
F 15 IPN 2852: alpha: 24 beta: 0 bp: 0



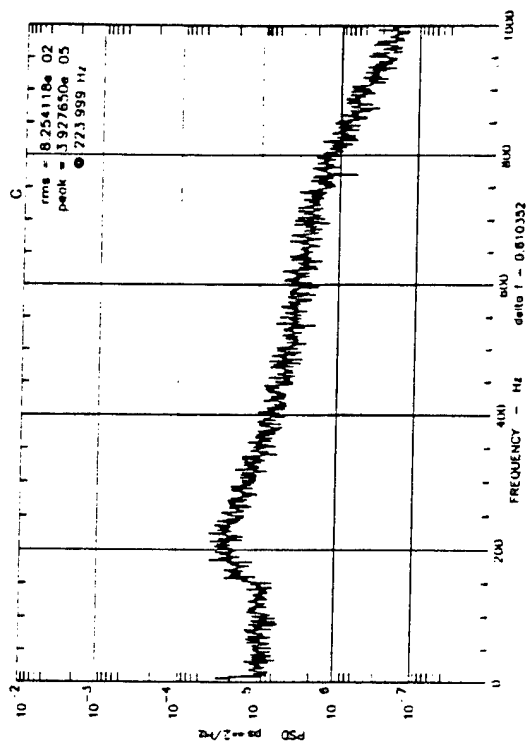
F 15 IPN 2852: alpha: 24 beta: 0 bp: 0

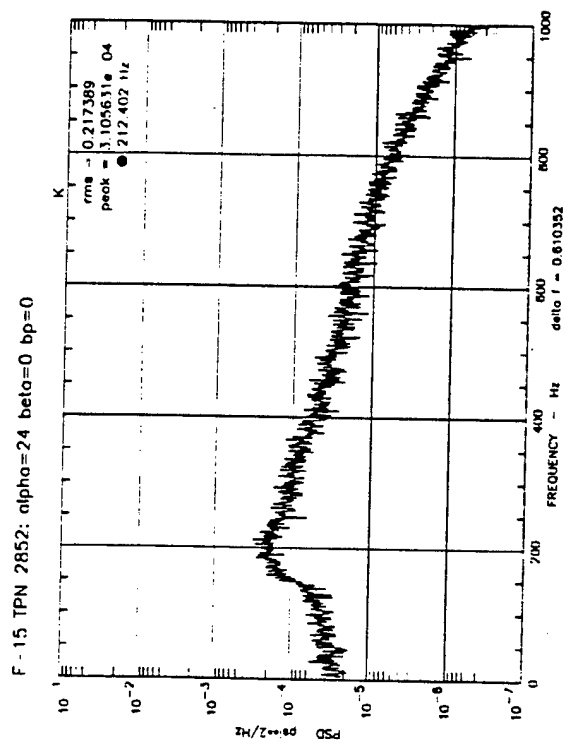
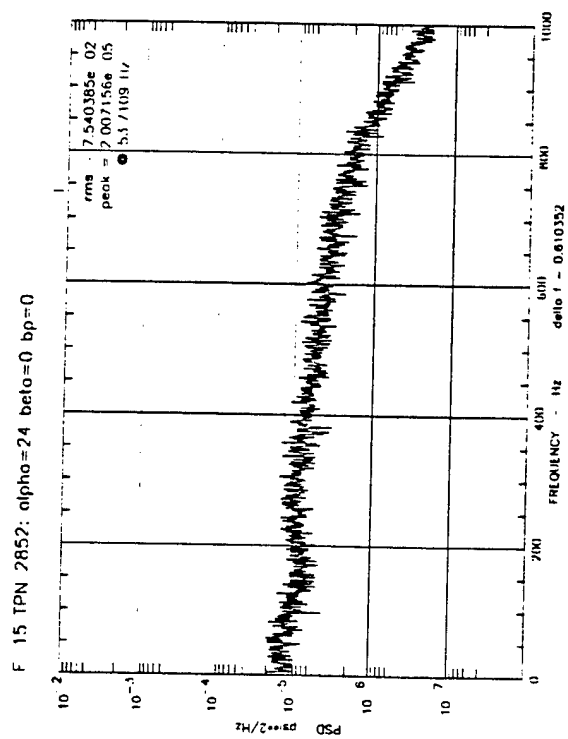
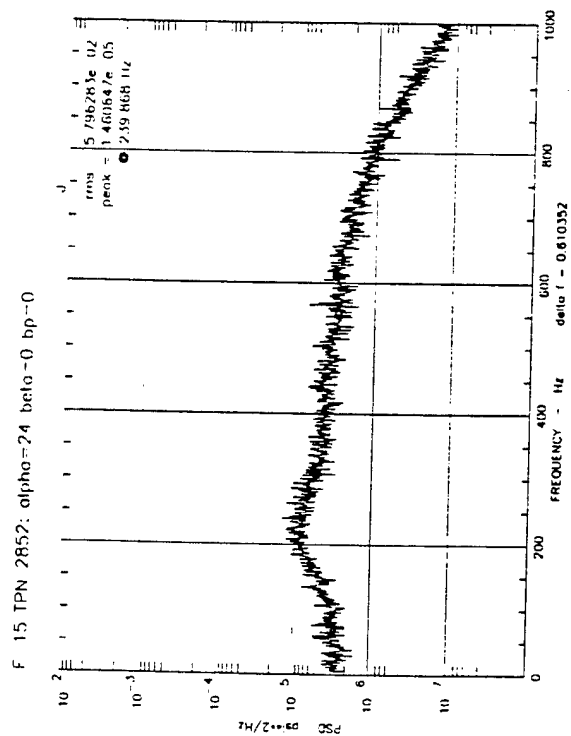


F 15 IPN 2852: alpha: 24 beta: 0 bp: 0

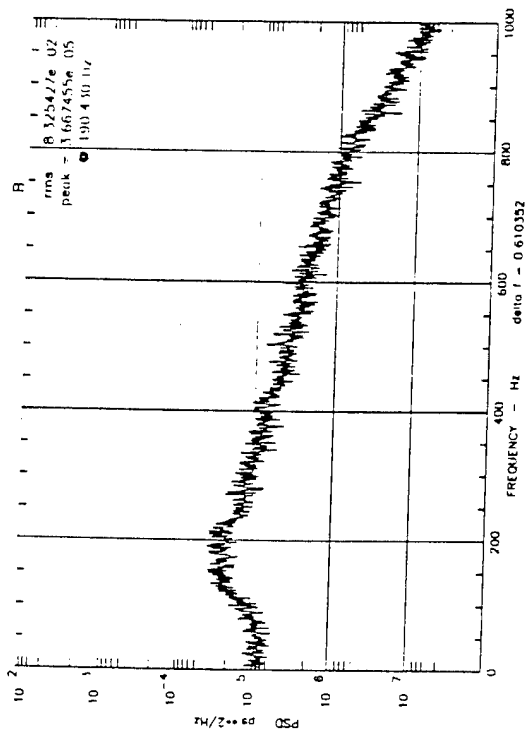


F 15 IPN 2852: alpha: 24 beta: 0 bp: 0

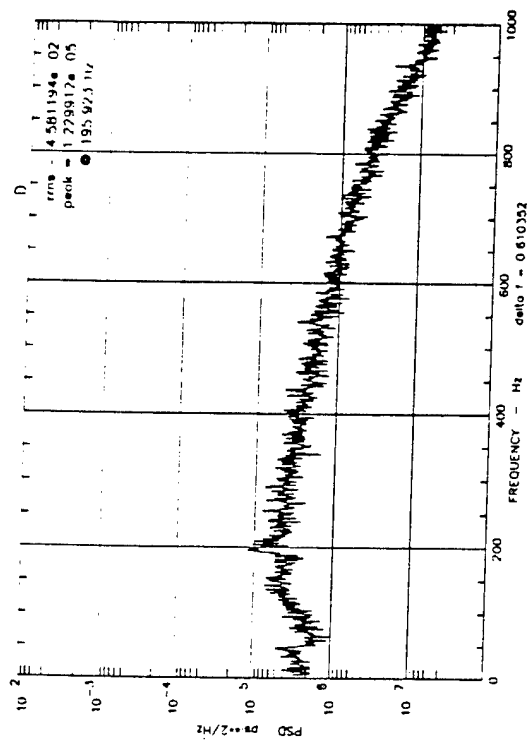




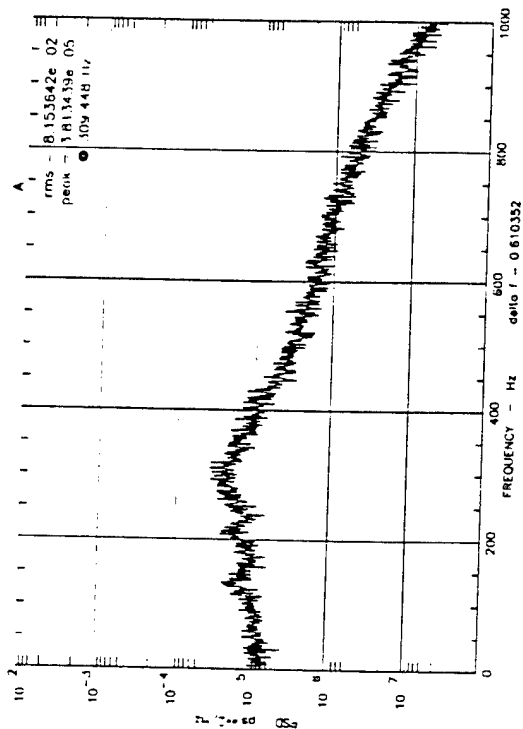
F 15 TPN 285.3:  $\alpha=28$   $\beta=0$  bp=0



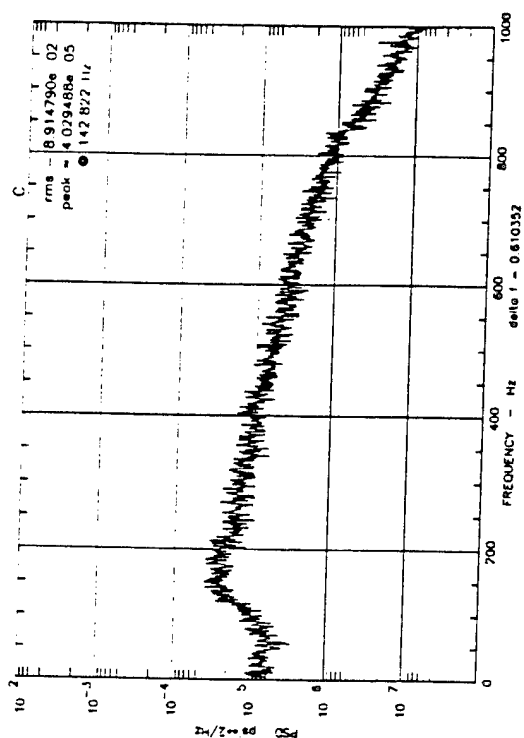
F 15 TPN 285.3:  $\alpha=28$   $\beta=0$  bp=0

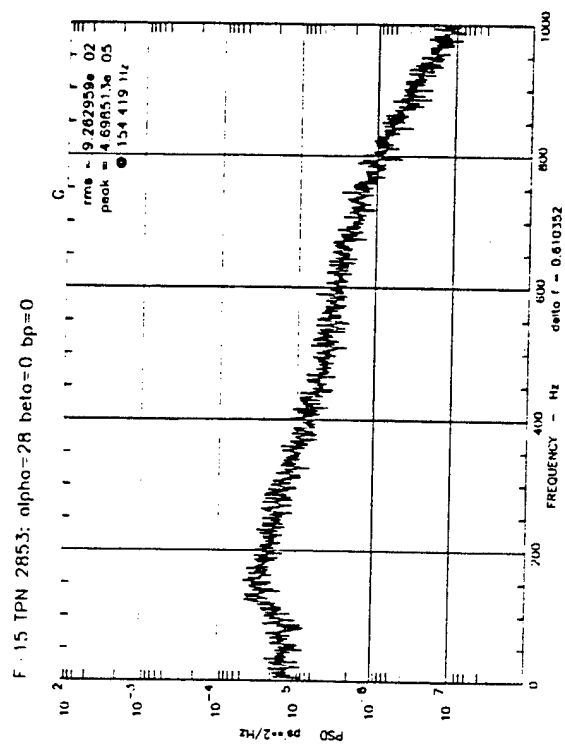
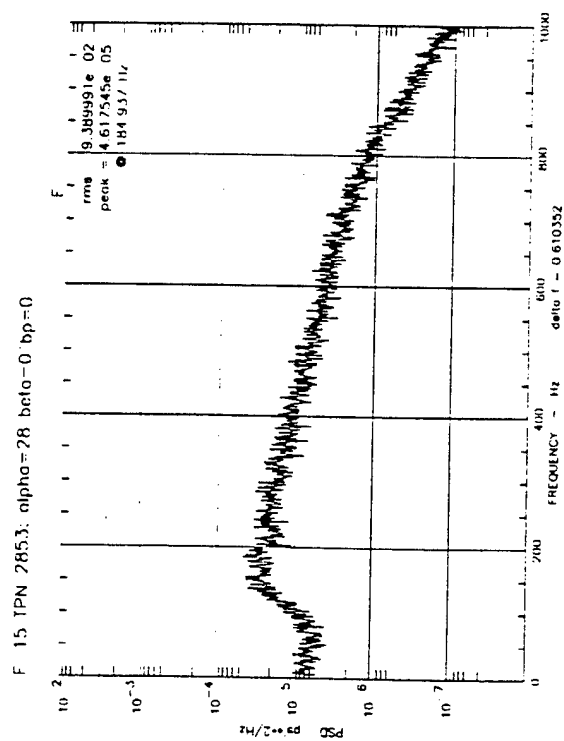
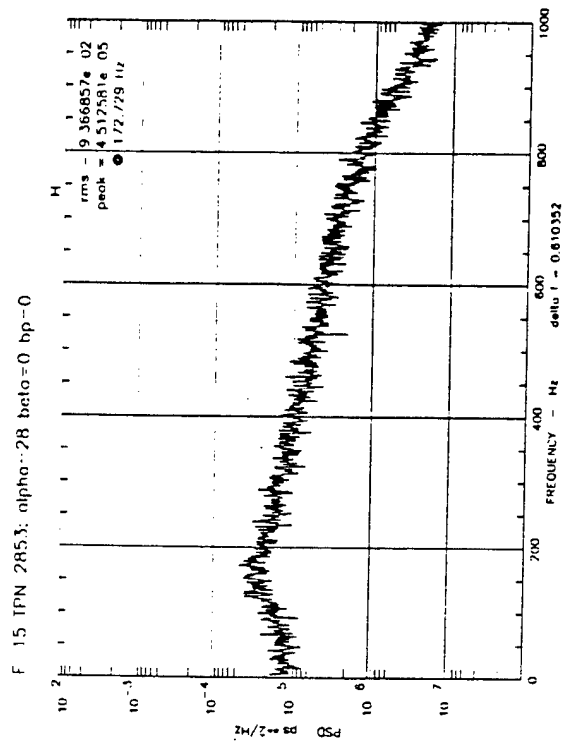
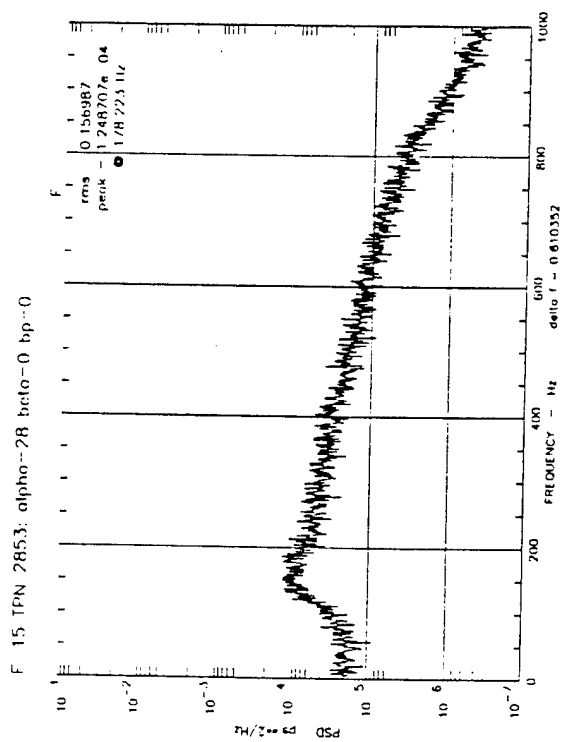


F 15 TPN 285.3:  $\alpha=28$   $\beta=0$  bp=0

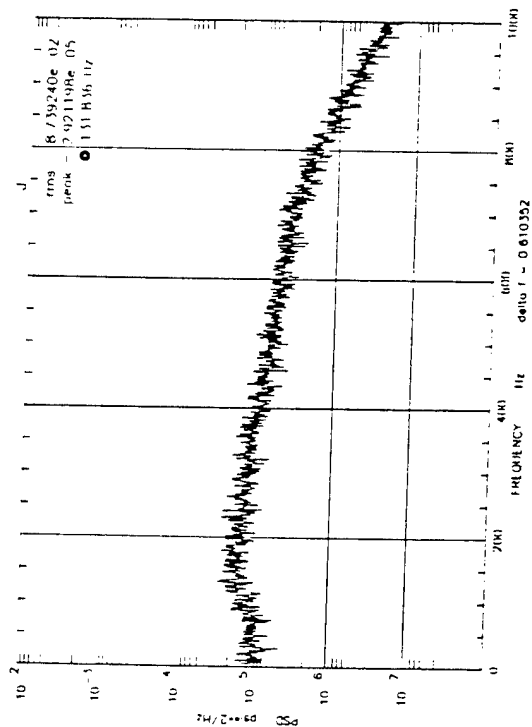


F 15 TPN 285.3:  $\alpha=28$   $\beta=0$  bp=0

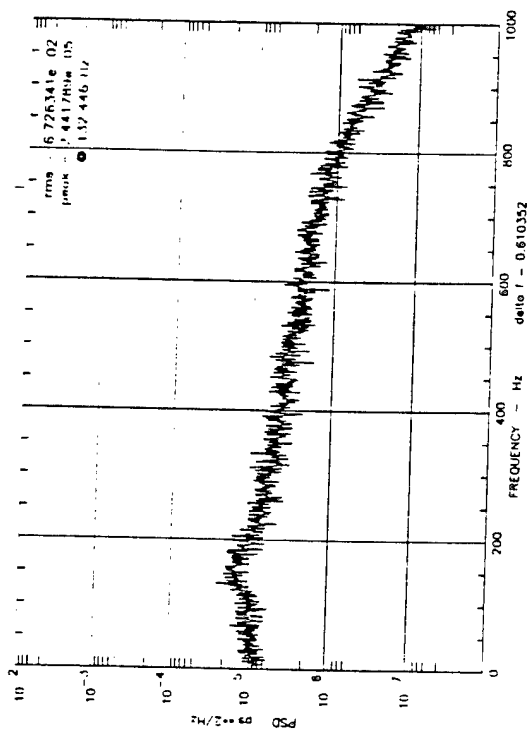




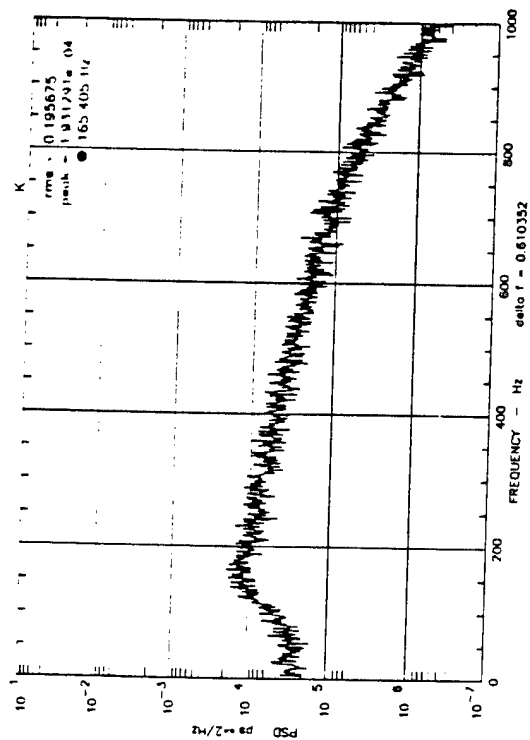
F 15 TPN 2853: alpha=28 beta=0 bp=0



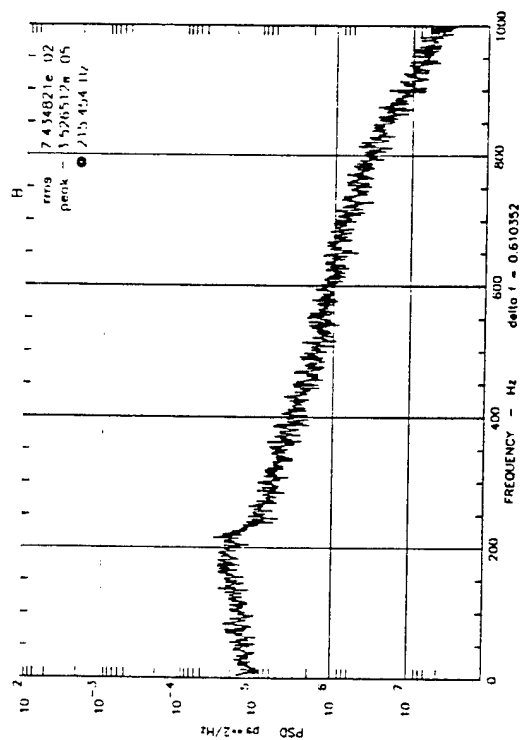
F 15 TPN 2853: alpha=28 beta=0 bp=0



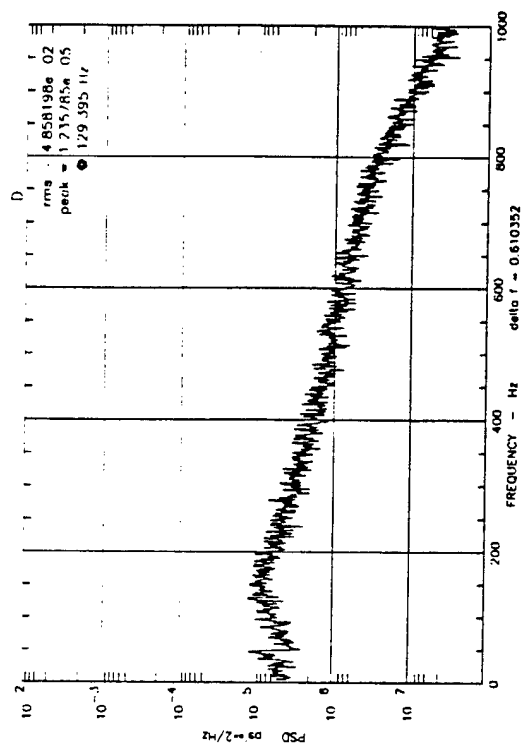
F 15 TPN 2853: alpha=28 beta=0 bp=0



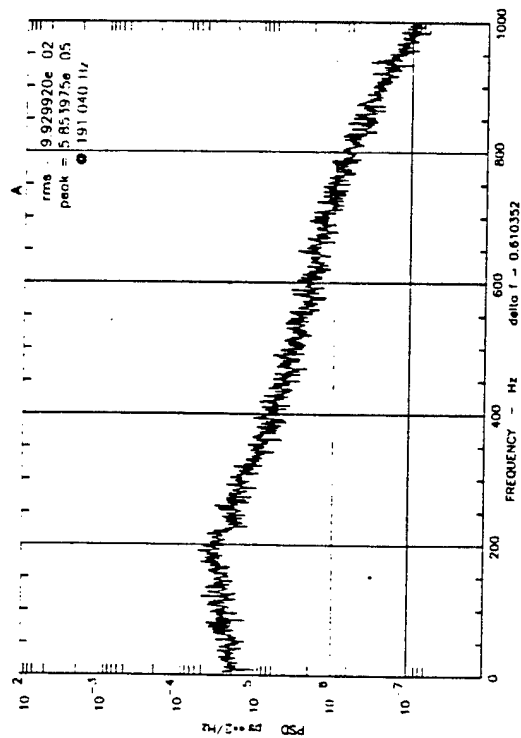
F 15 TPN 2854: alpha=32 beta=0 bp=0



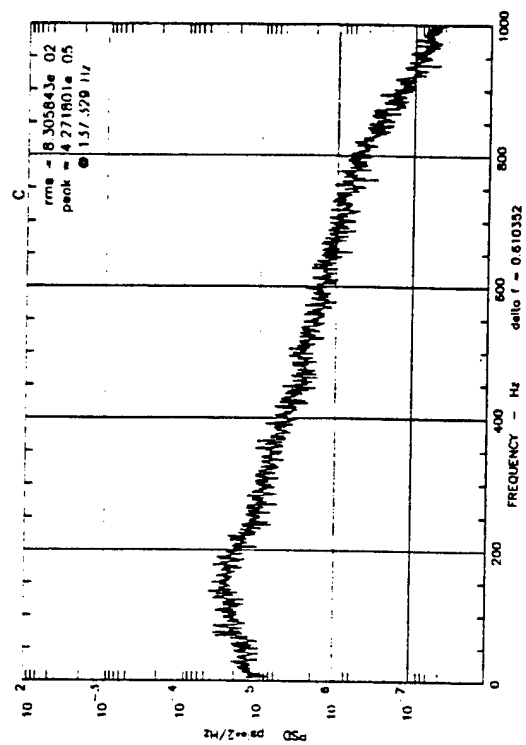
F 15 TPN 2854: alpha=32 beta=0 bp=0



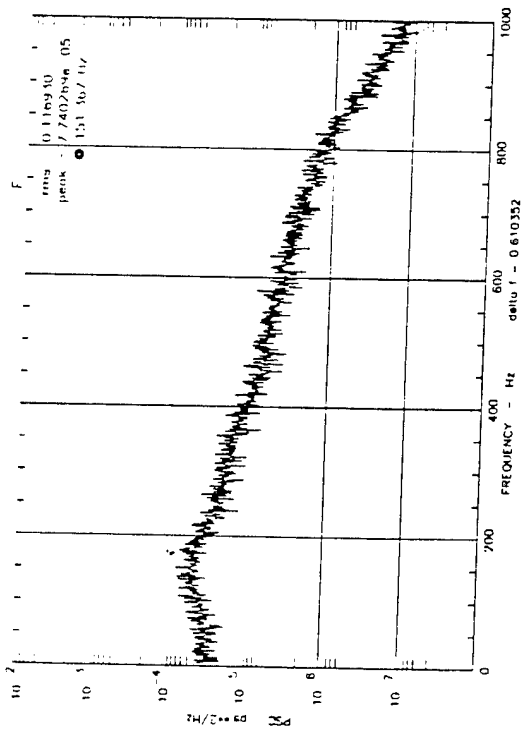
F 15 TPN 2854: alpha=32 beta=0 bp=0



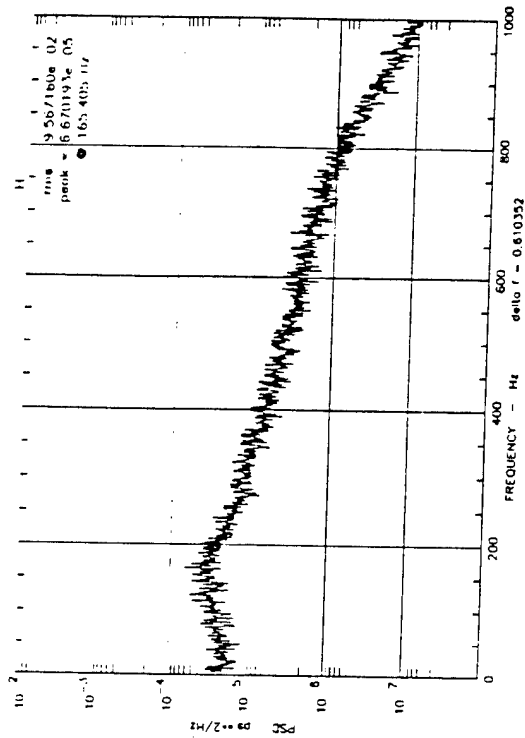
F 15 TPN 2854: alpha=32 beta=0 bp=0



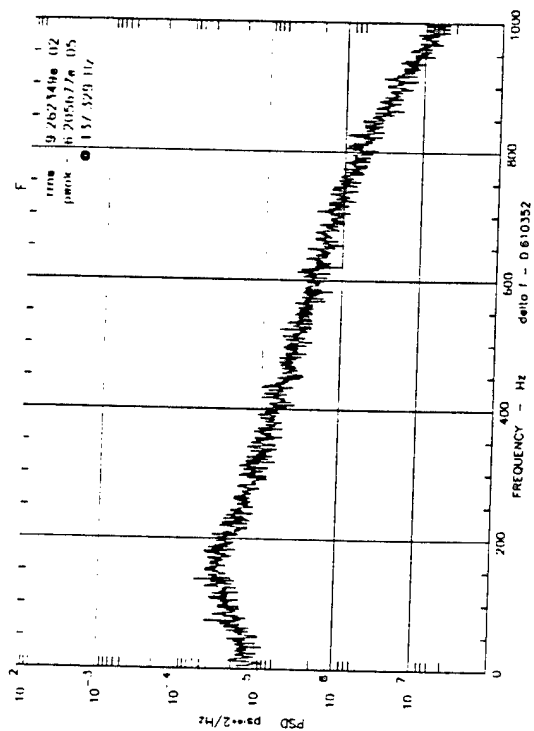
F 15 TPN 2854: alpha=.32 beta=0 bp=0



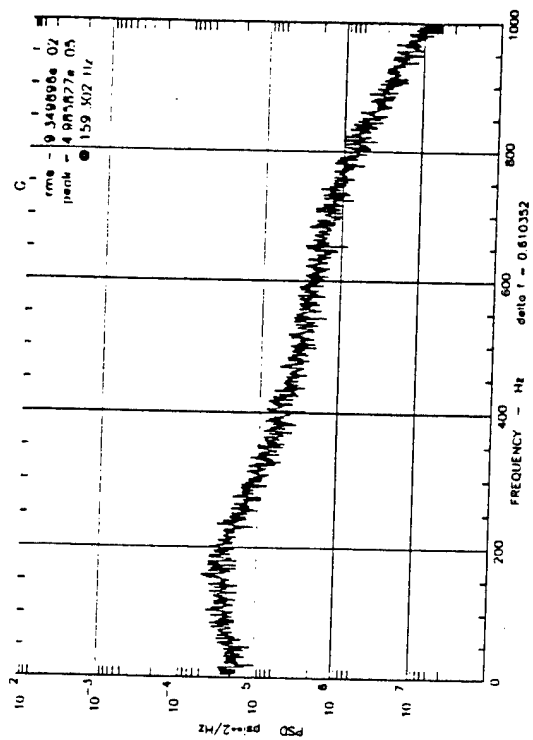
F 15 TPN 2854: alpha=.32 beta=0 bp=0

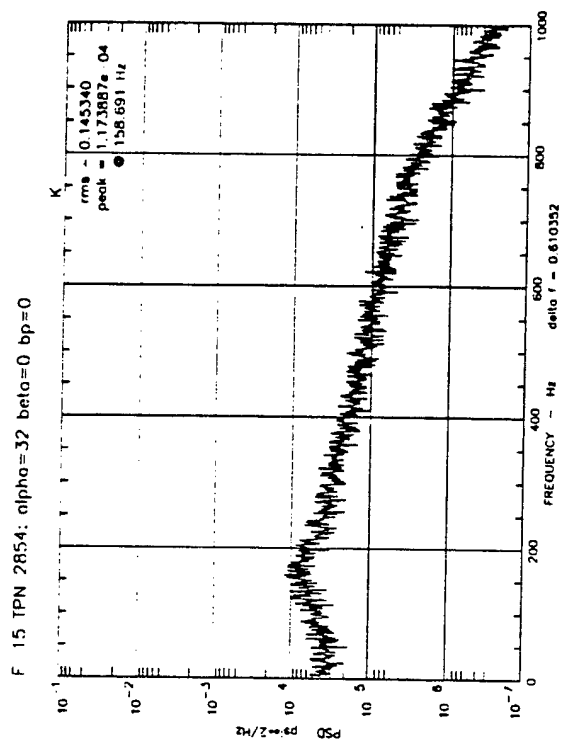
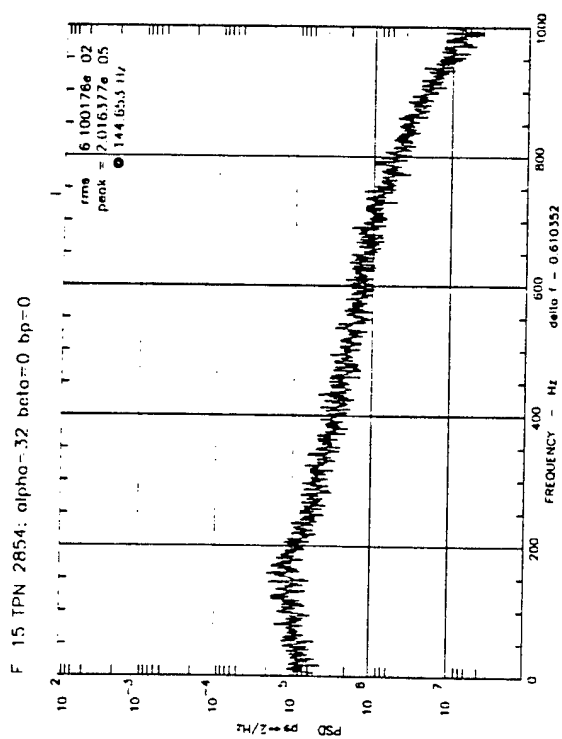
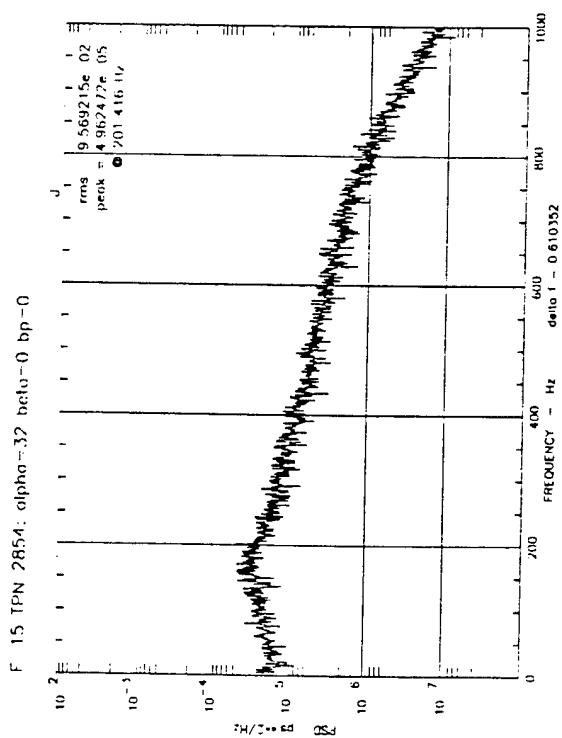


F 15 TPN 2854: alpha=.32 beta=0 bp=0



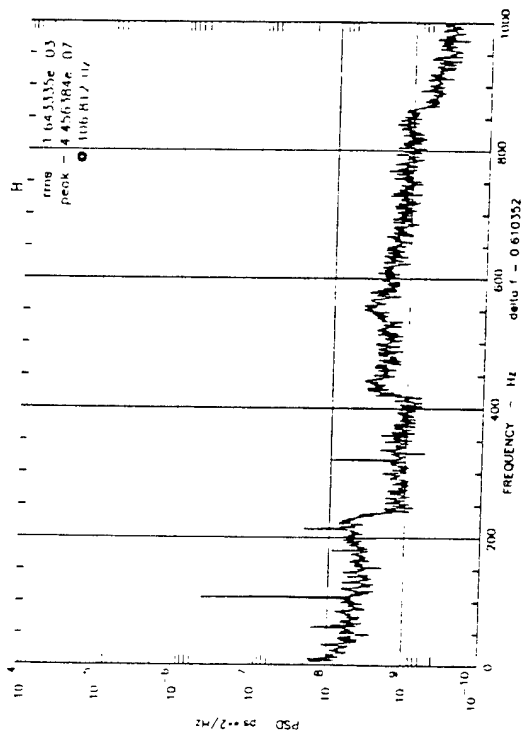
F 15 TPN 2854: alpha=.32 beta=0 bp=0



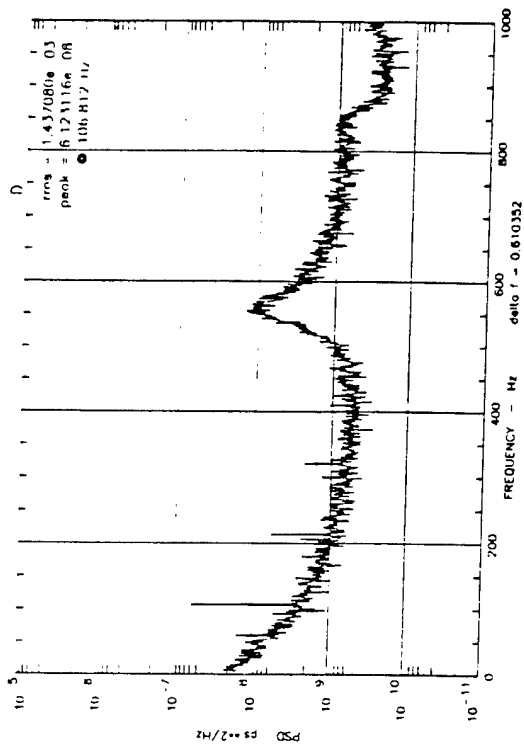




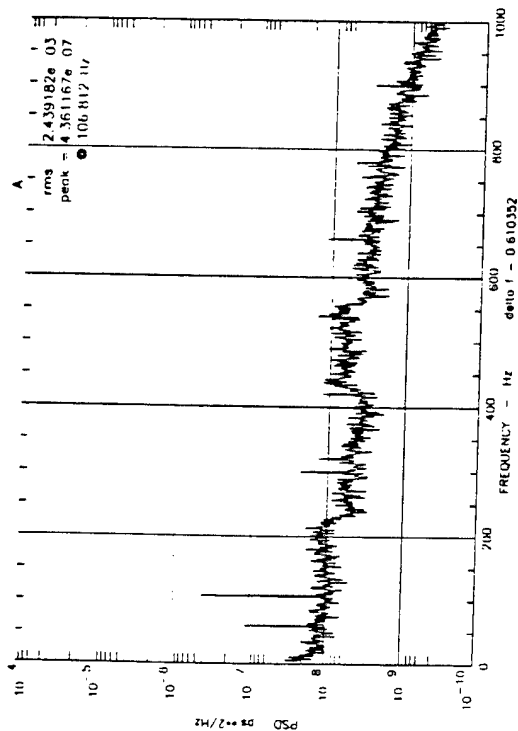
F 15 IPN 2864; alpha=8 beta= 4 bp=0



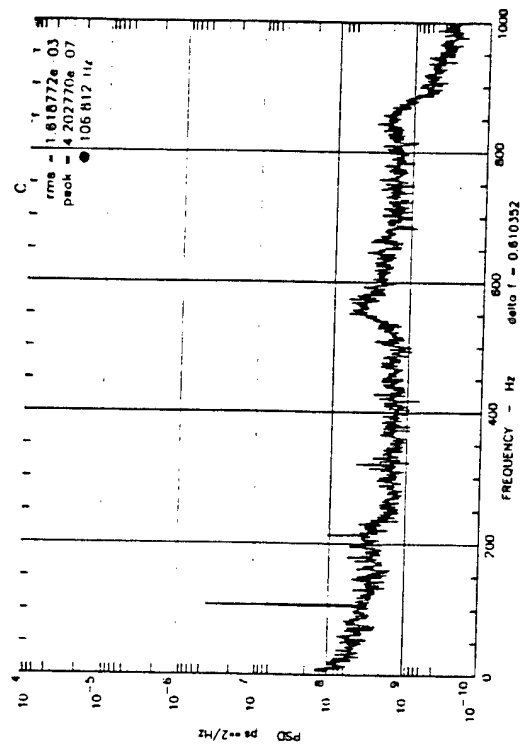
F 15 IPN 2864; alpha=8 beta= 4 bp=0



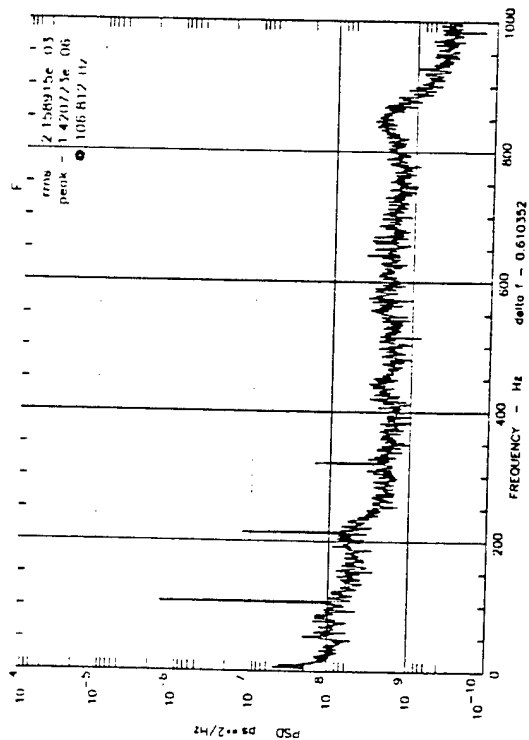
F 15 IPN 2864; alpha=8 beta= 4 bp=0



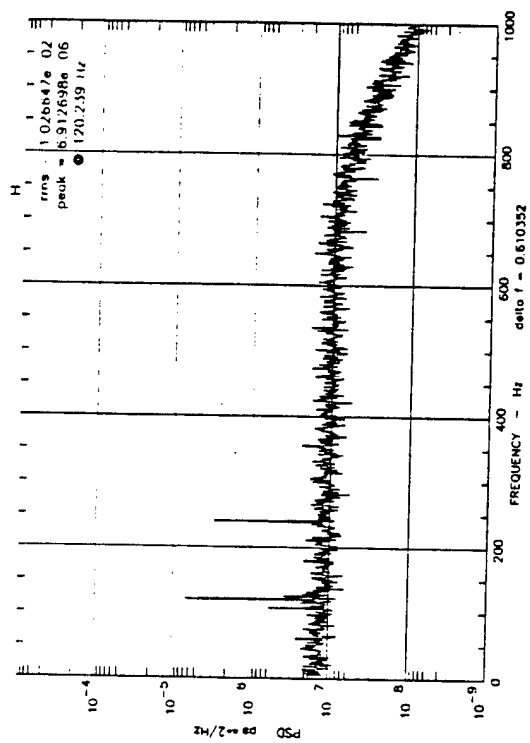
F 15 IPN 2864; alpha=8 beta= 4 bp=0



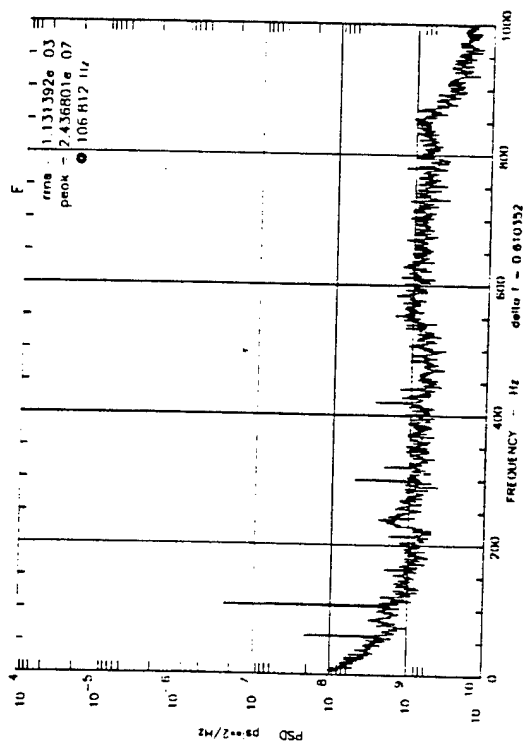
F 15 TPN 2864: alpha=8 beta=-4 bp=0



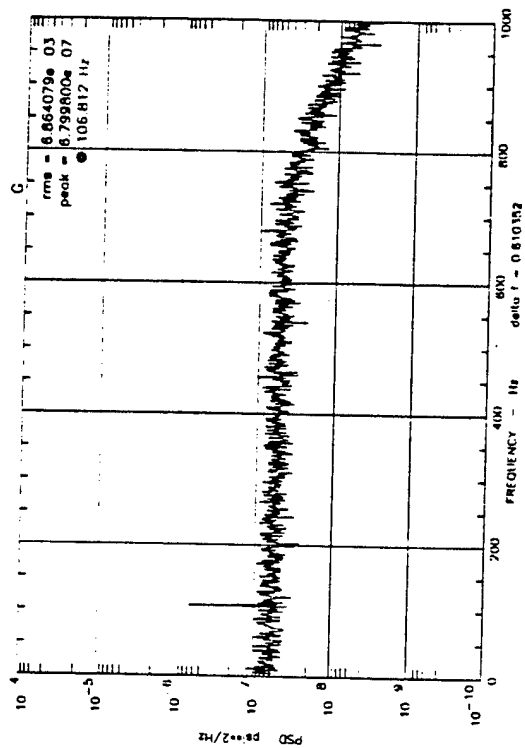
F 15 TPN 2864: alpha=8 beta=4 bp=0



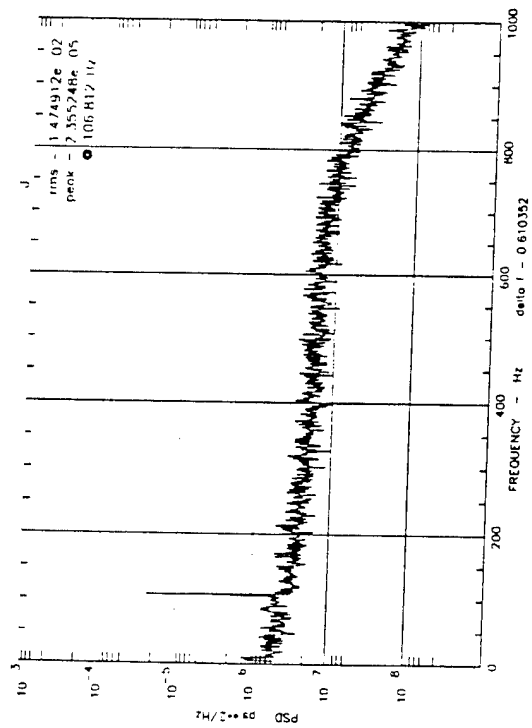
F 15 TPN 2864: alpha=8 beta=-4 bp=0



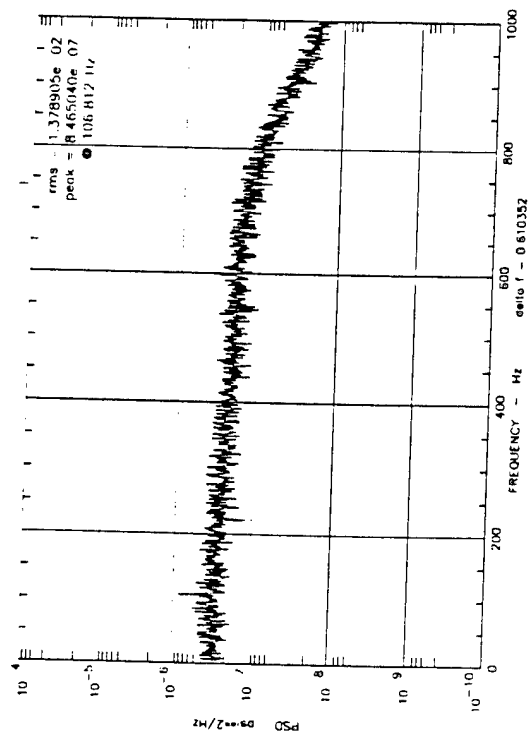
F 15 TPN 2864: alpha=8 beta=-4 bp=0



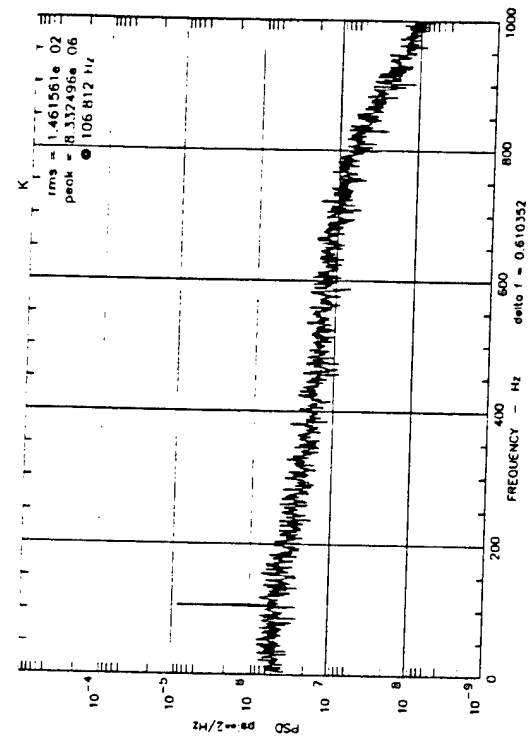
F 15 TPN 2864:  $\alpha=8$   $\beta=0$  4 bp=0

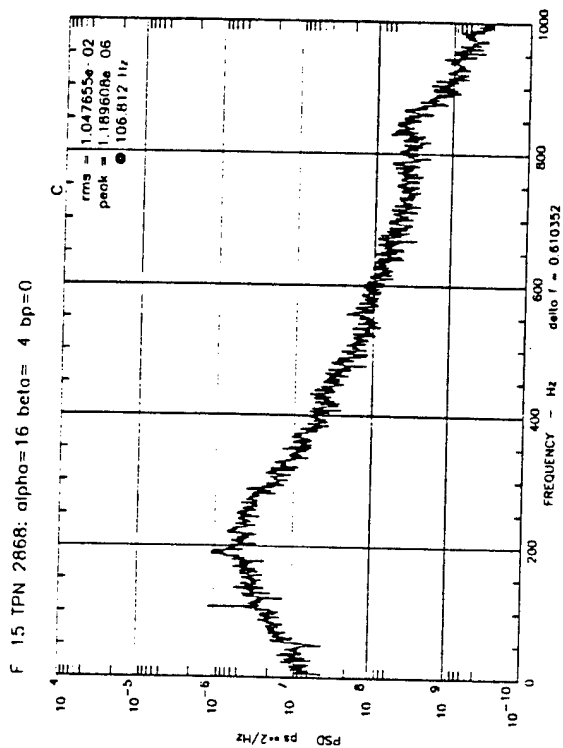
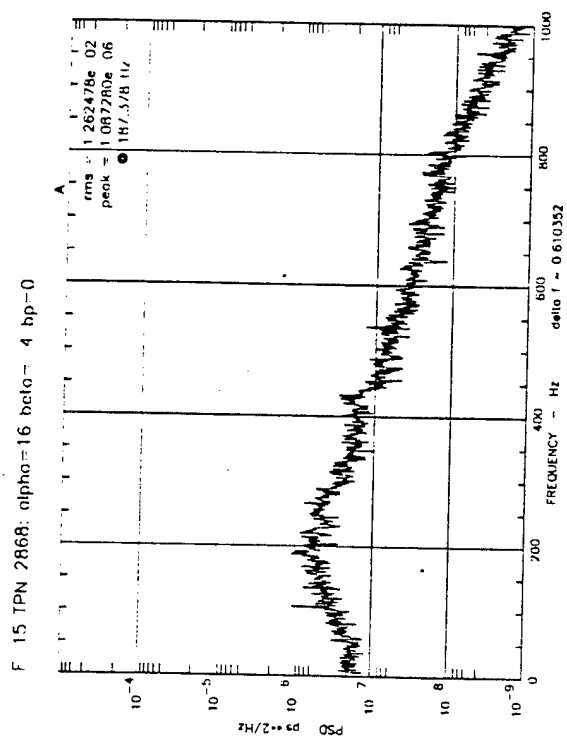
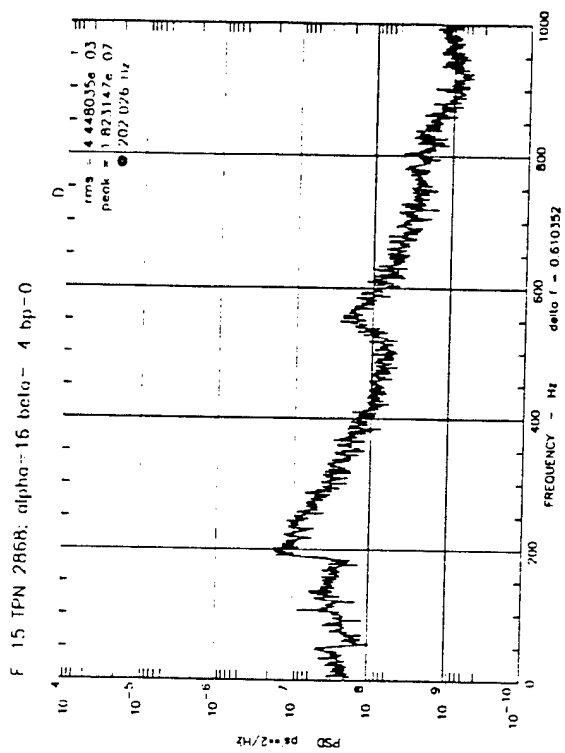
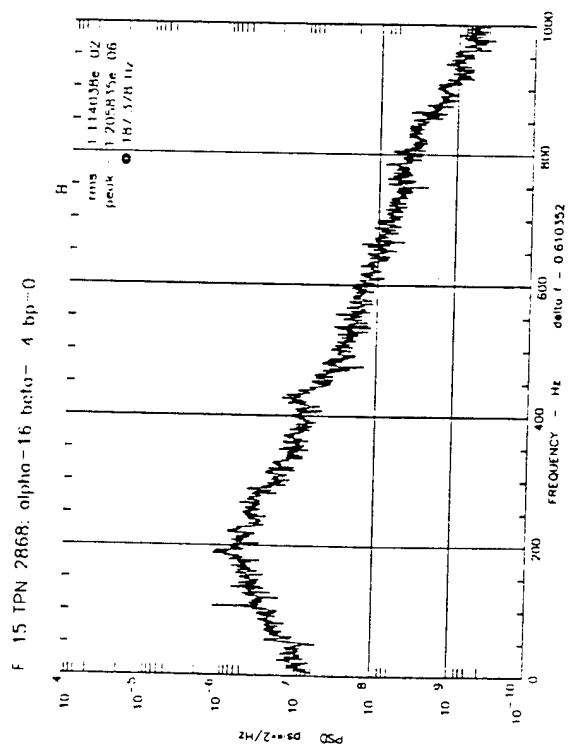


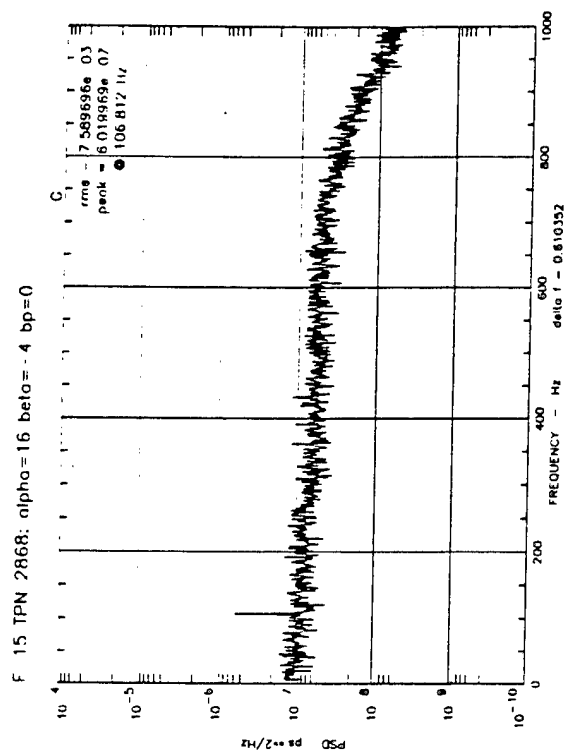
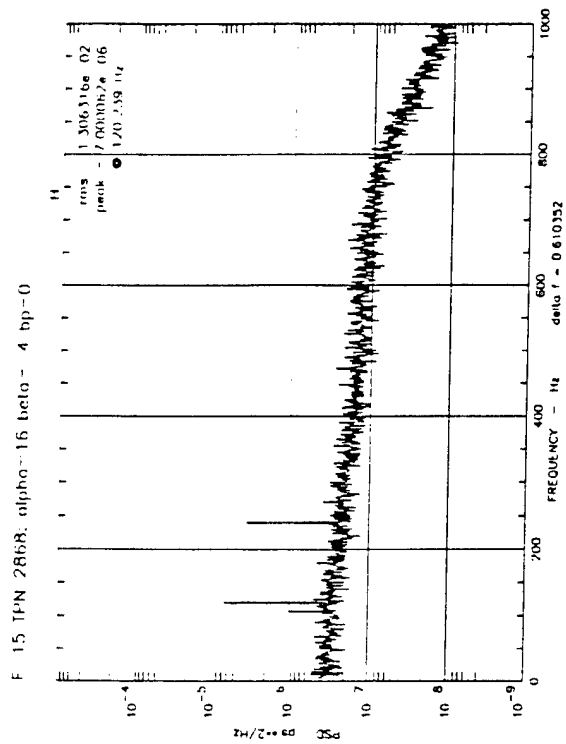
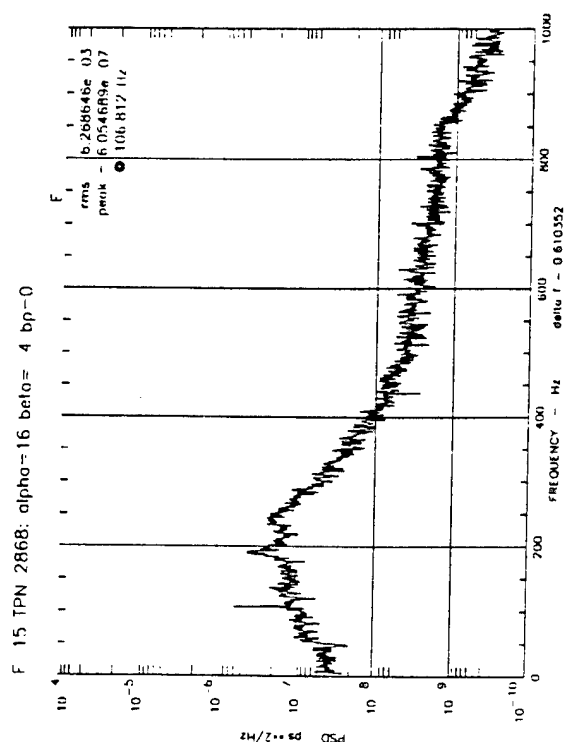
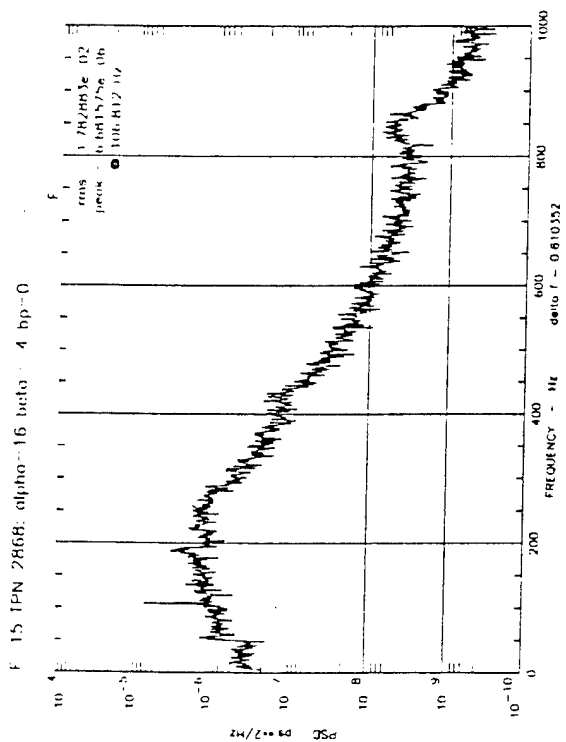
F 15 TPN 2864:  $\alpha=8$   $\beta=0$  4 bp=0

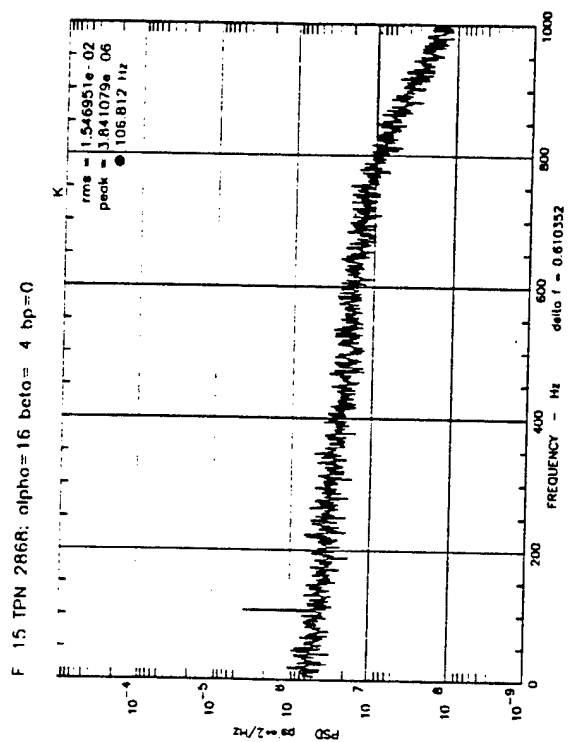
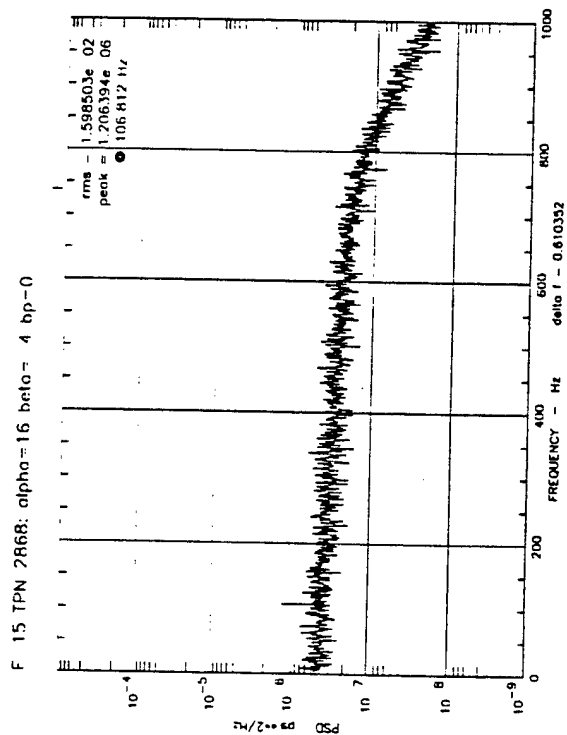
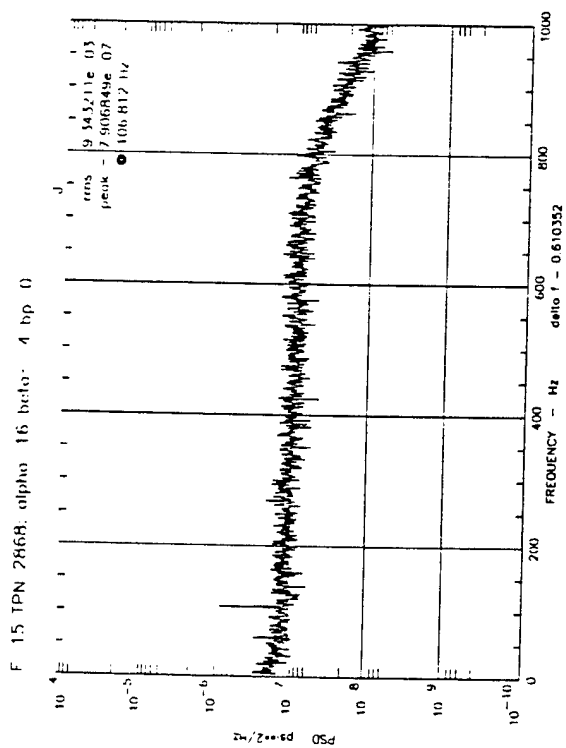


F 15 TPN 2864:  $\alpha=8$   $\beta=0$  4 bp=0

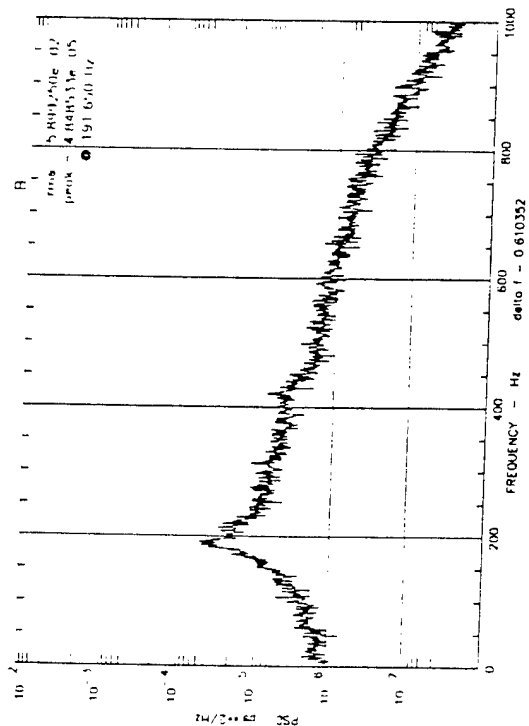




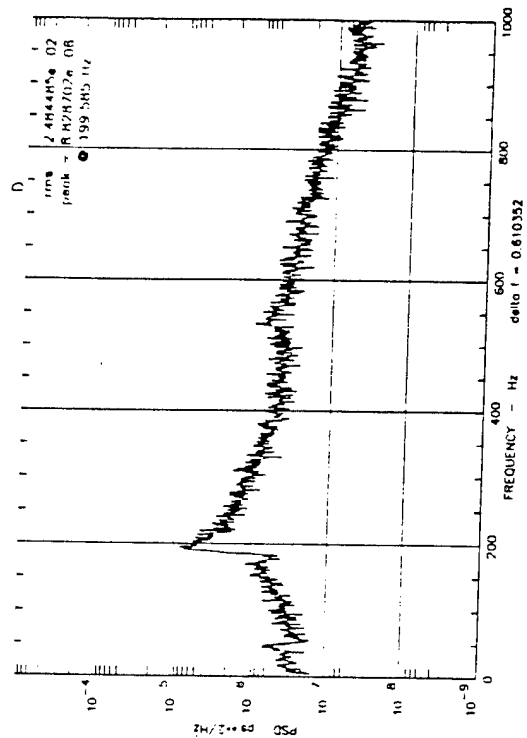




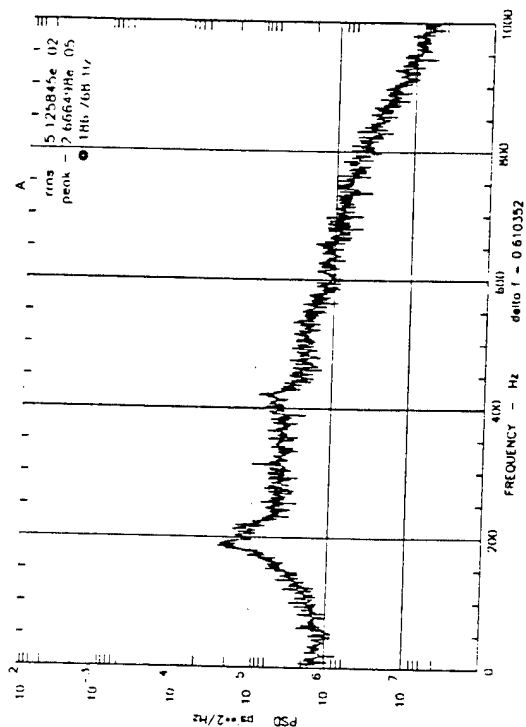
F 15 TPN 2870: alpha=20 beta= 4 bp=0



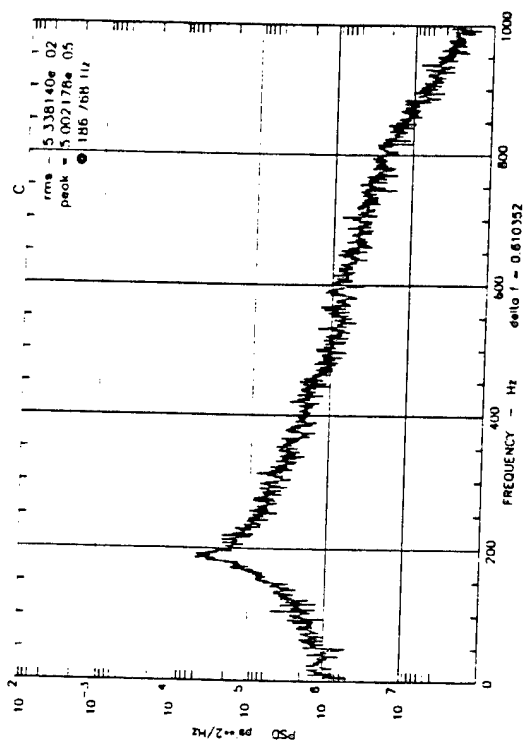
F 15 TPN 2870: alpha=20 beta= 4 bp=0



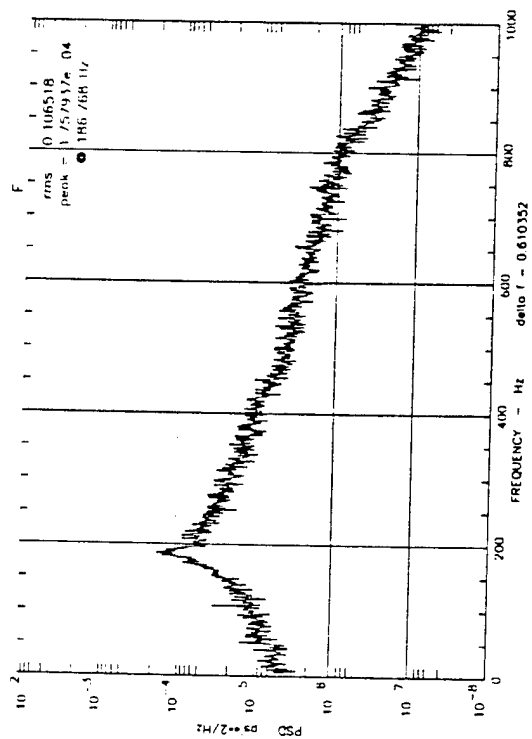
F 15 TPN 2870: alpha=20 beta= 4 bp=0



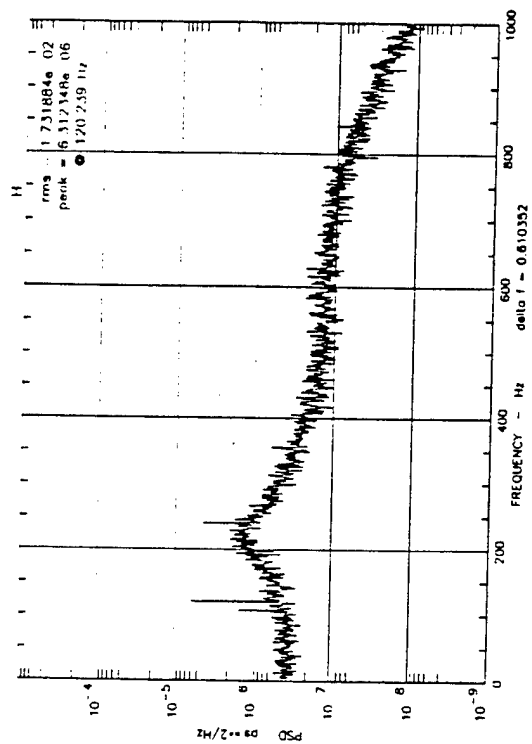
F 15 TPN 2870: alpha=20 beta= 4 bp=0



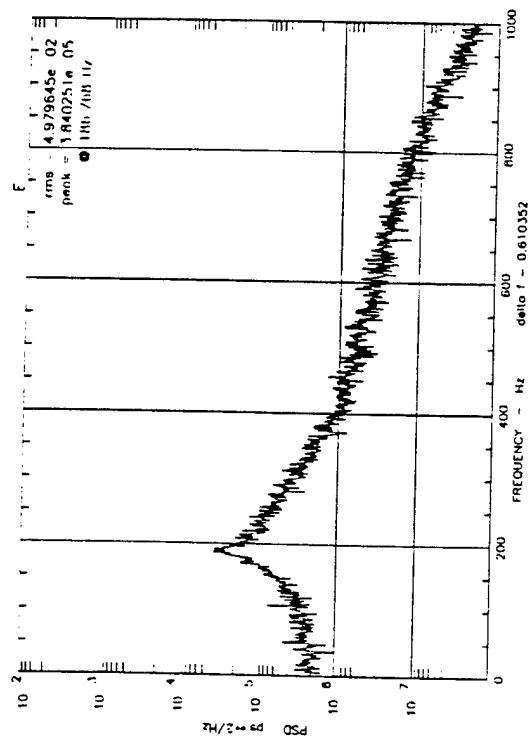
F 15 TPN 2870:  $\alpha=20$   $\beta=4$   $\beta=0$



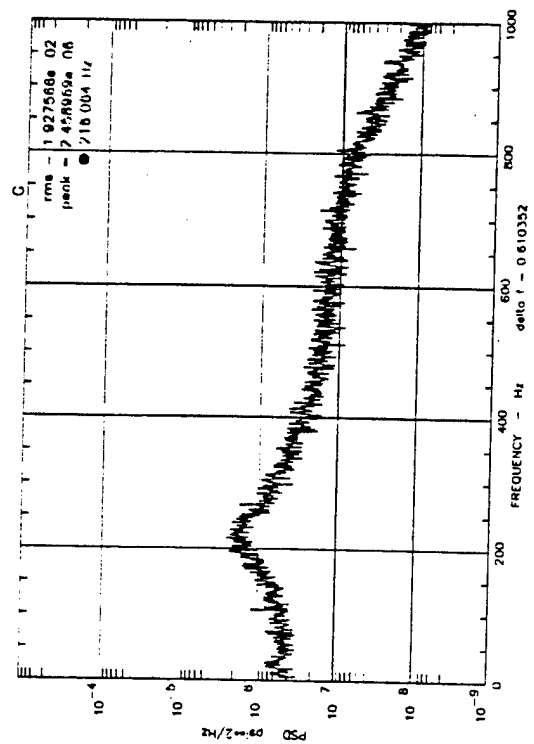
F 15 TPN 2870:  $\alpha=20$   $\beta=-4$   $\beta=0$



F 15 TPN 2870:  $\alpha=20$   $\beta=4$   $\beta=0$

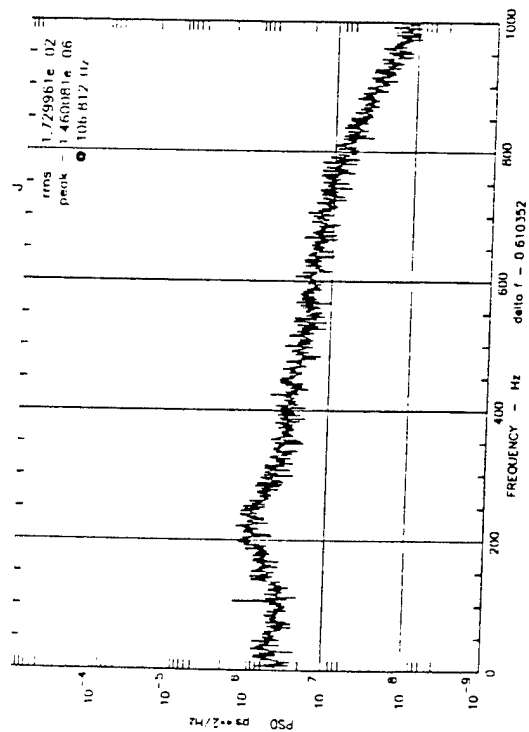


F 15 TPN 2870:  $\alpha=20$   $\beta=-4$   $\beta=0$

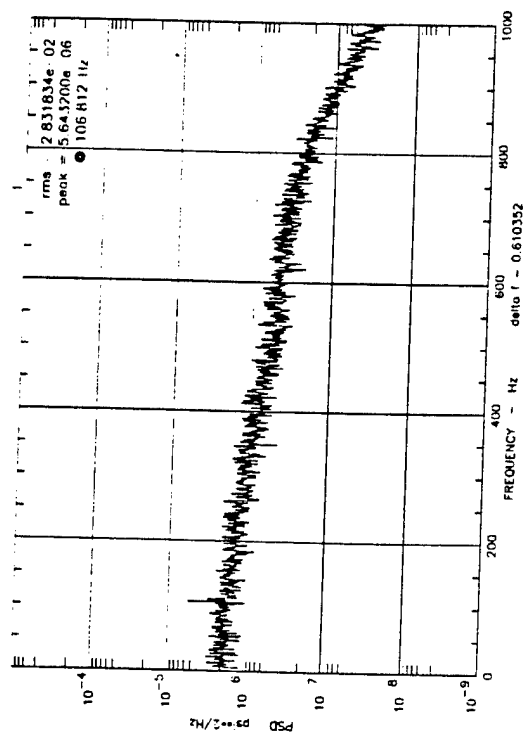




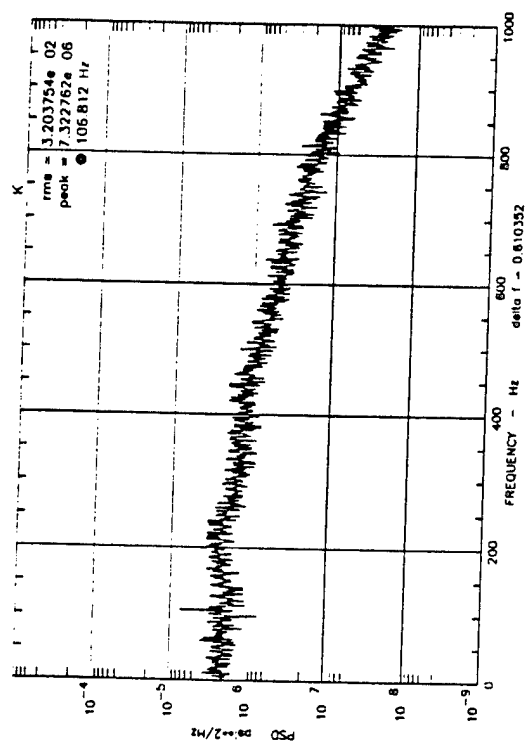
F 15 TPN 2870: alpha=20 beta=-4 bp=0



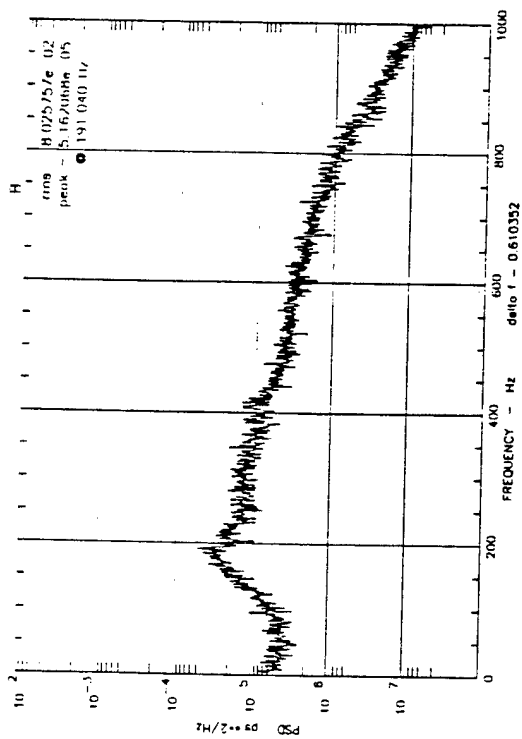
F 15 TPN 2870: alpha=20 beta=-4 bp=0



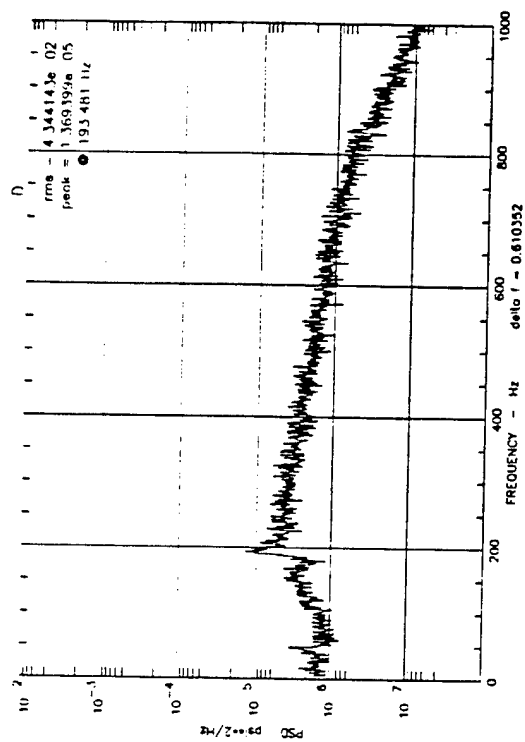
F 15 TPN 2870: alpha=20 beta=-4 bp=0



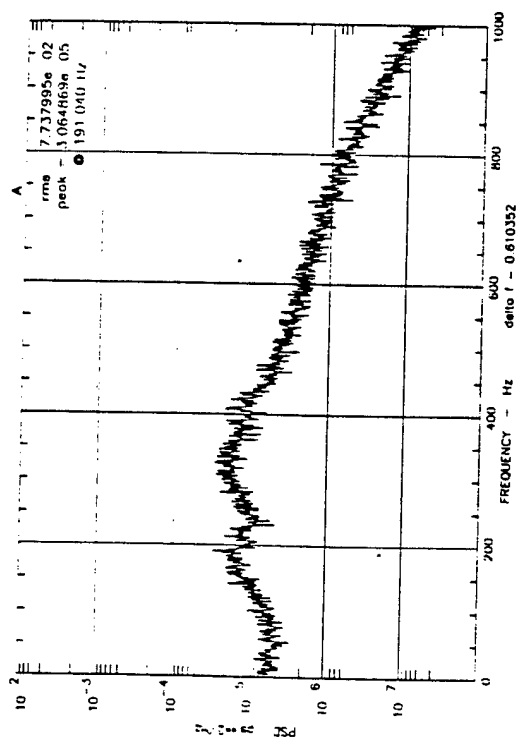
F 15 TPN 2872: alpha=24 beta= 4 bp=0



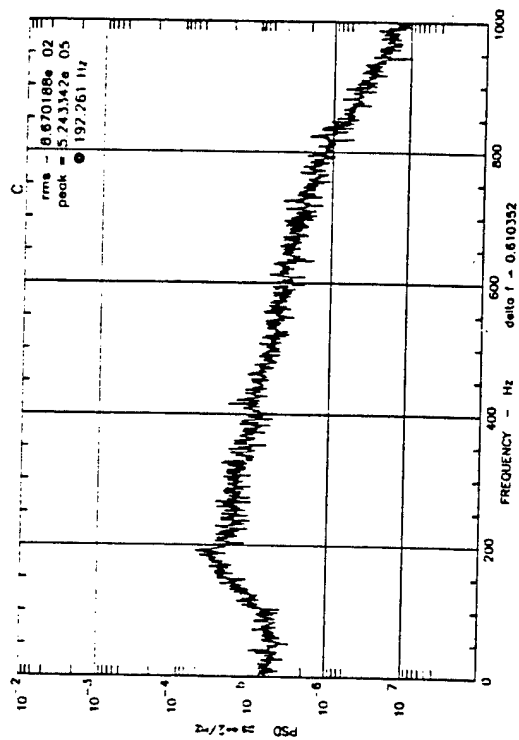
F 15 TPN 2872: alpha=24 beta= 4 bp=0

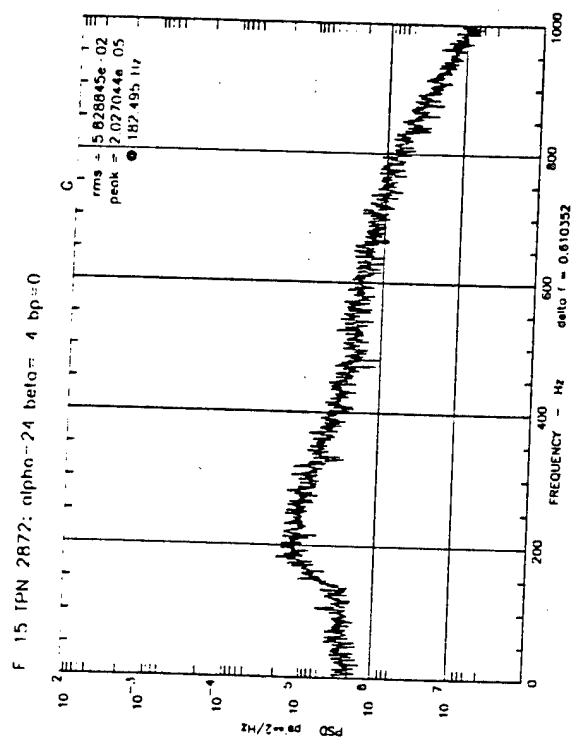
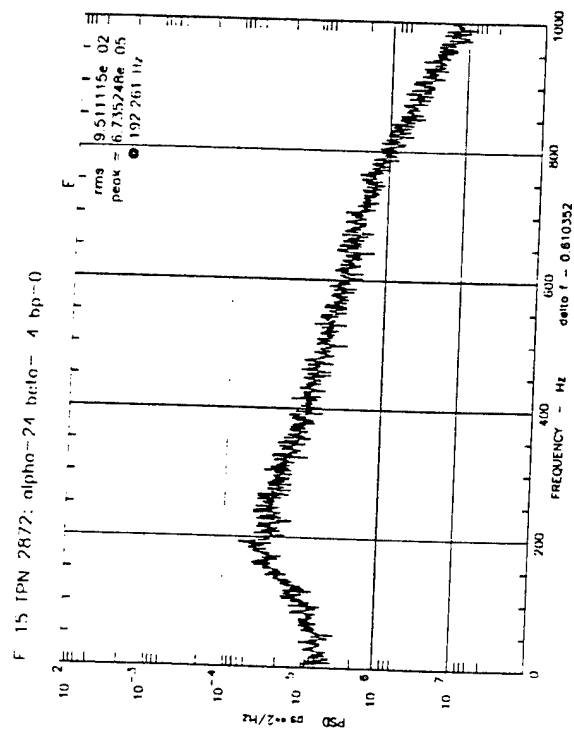
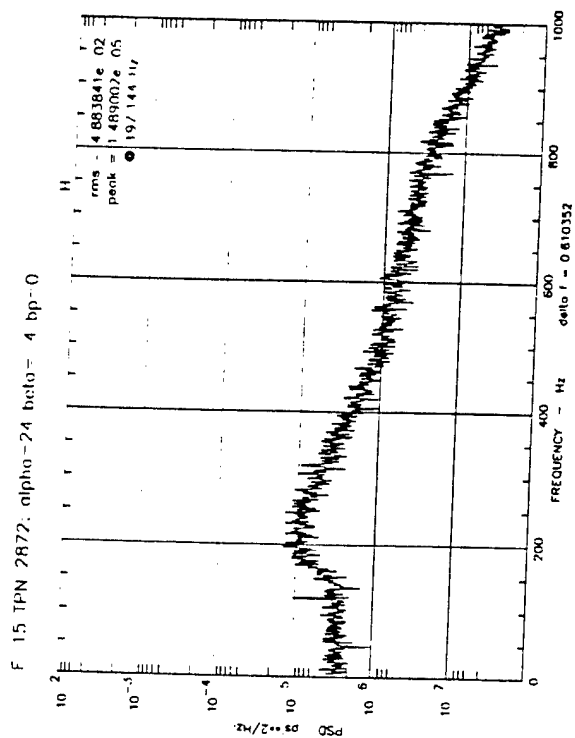
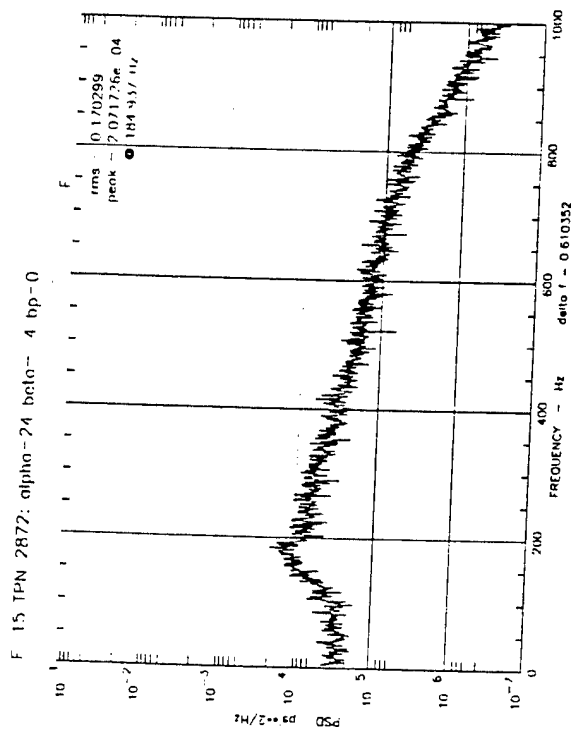


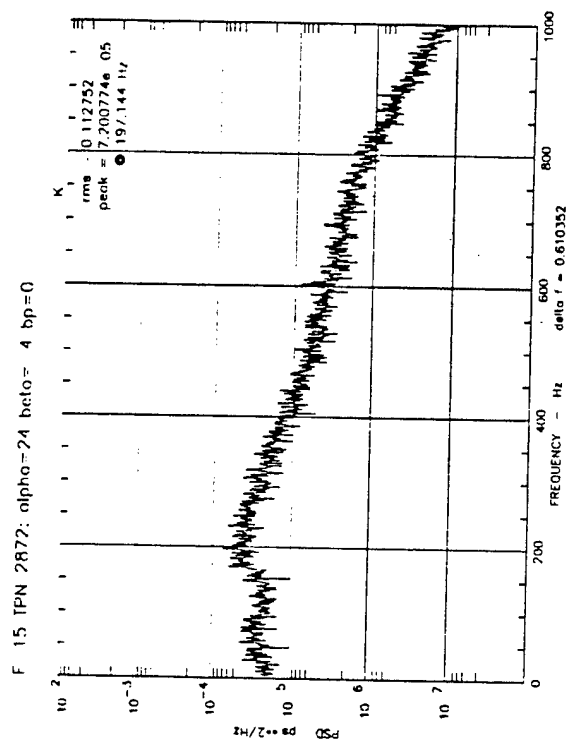
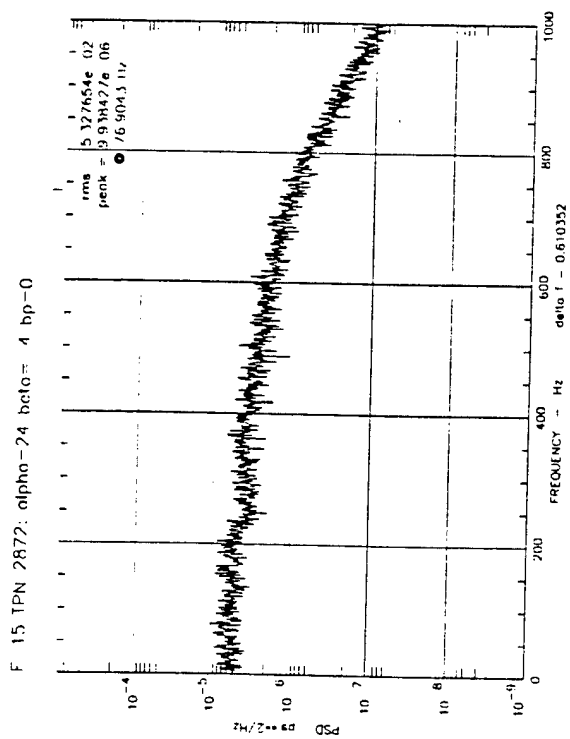
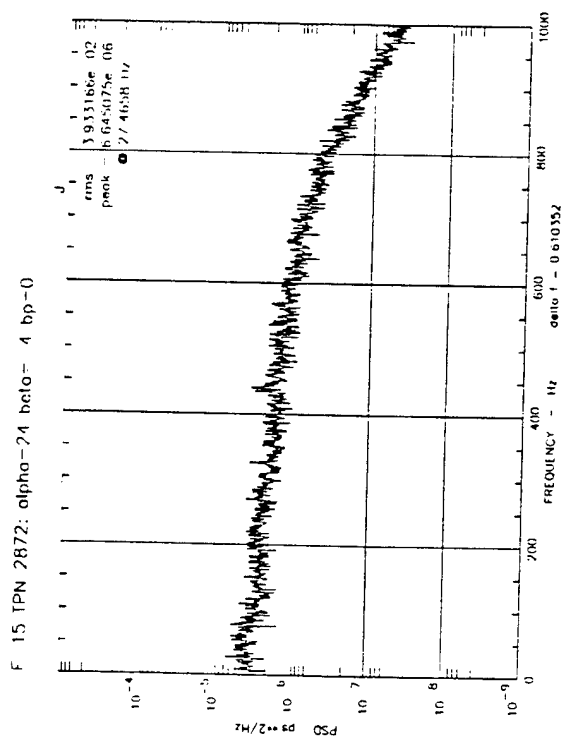
F 15 TPN 2872: alpha=24 beta= 4 bp=0



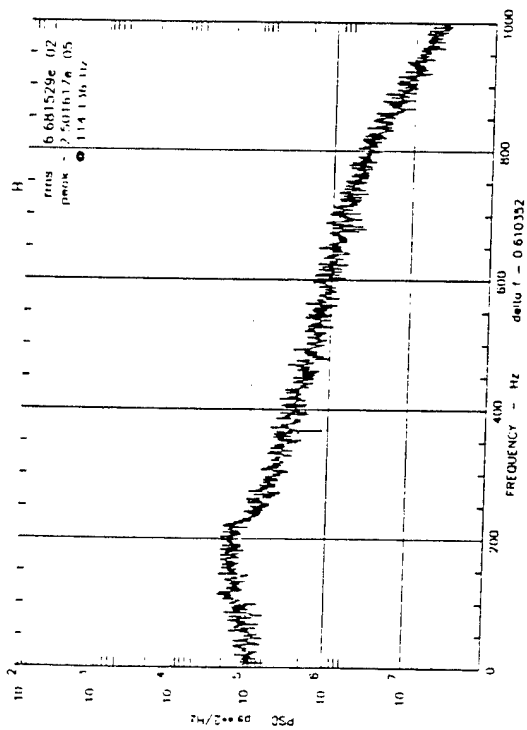
F 15 TPN 2872: alpha=24 beta= 4 bp=0



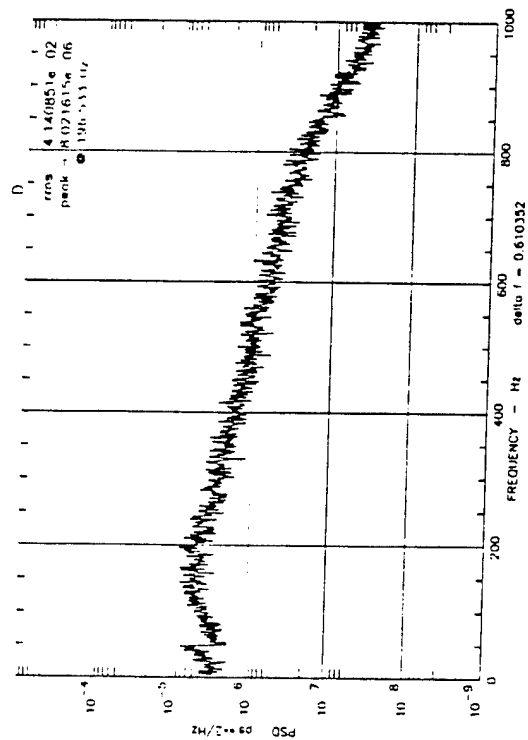




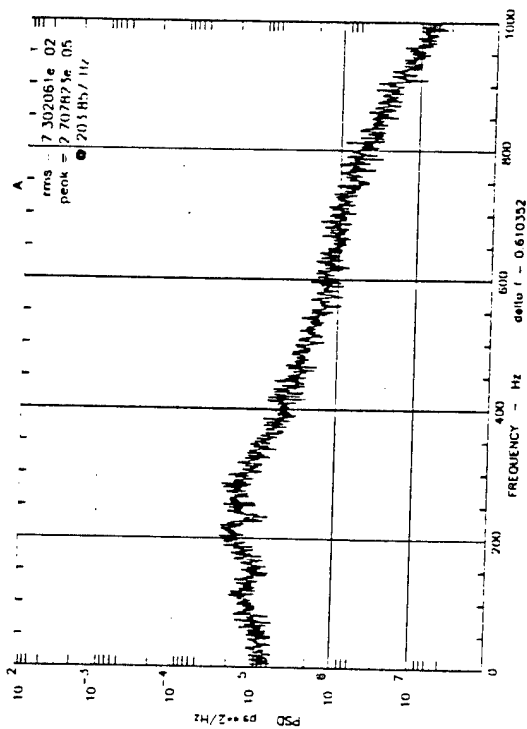
F 15 IPN 2873; alpha-28 beta= 4 bp=0



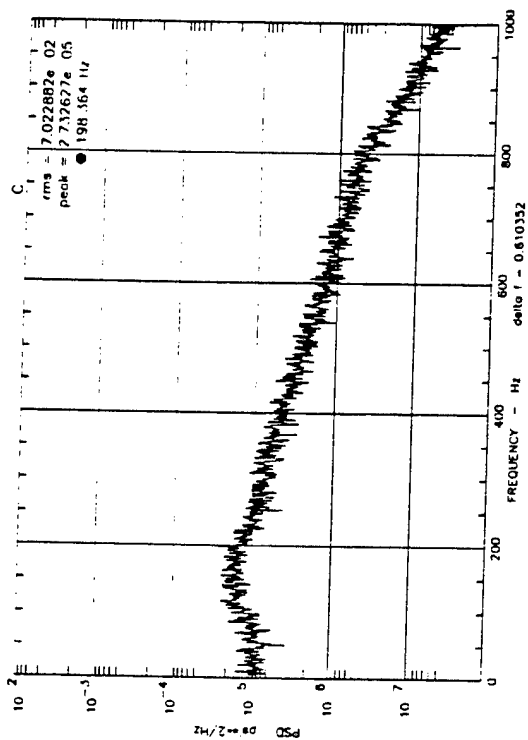
F 15 IPN 2873; alpha-28 beta= 4 bp=0



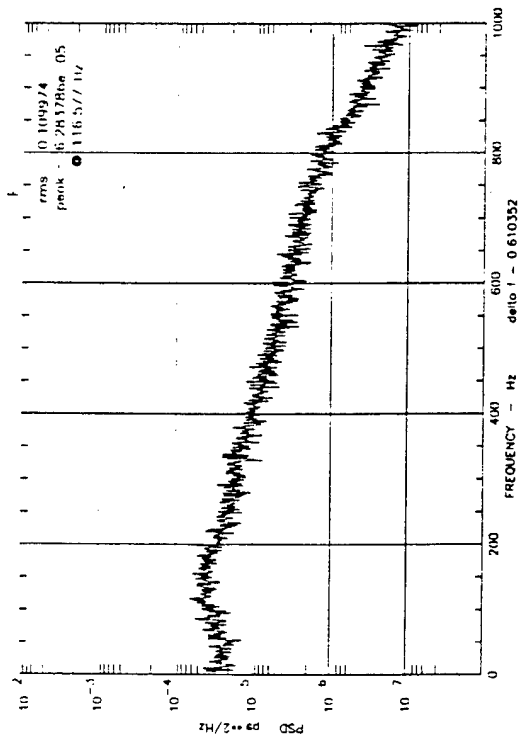
F 15 IPN 2873; alpha-28 beta= 4 bp=0



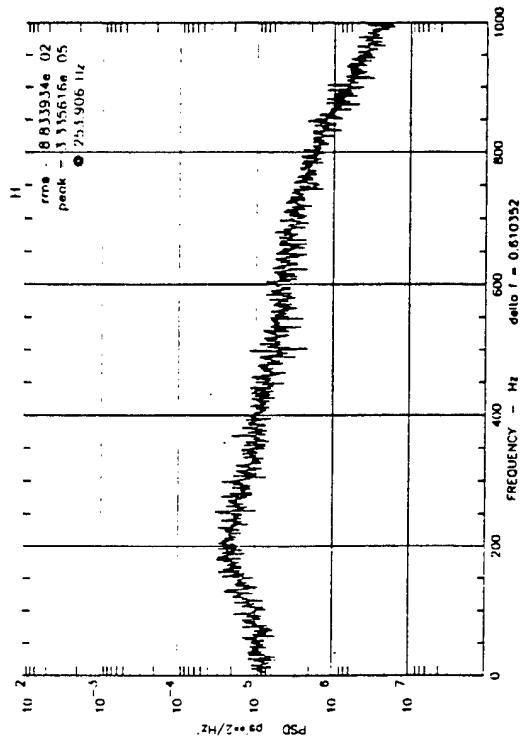
F 15 IPN 2873; alpha-28 beta= 4 bp=0



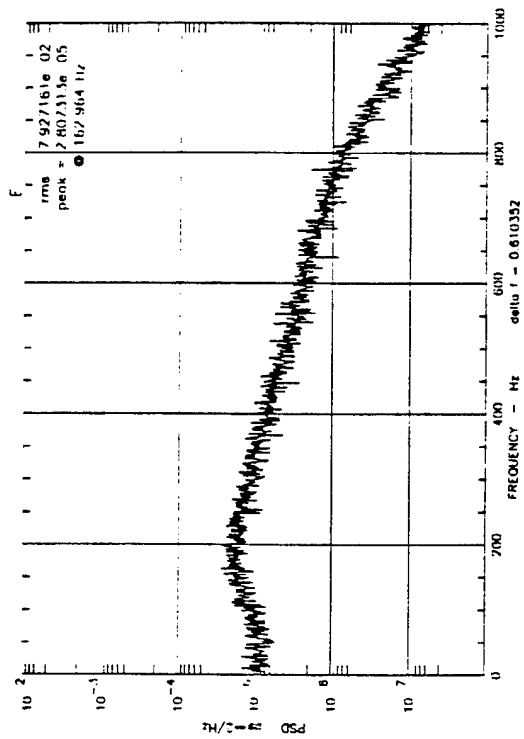
F 15 TPN 2873; alpha=28 beta= 4 bp=0



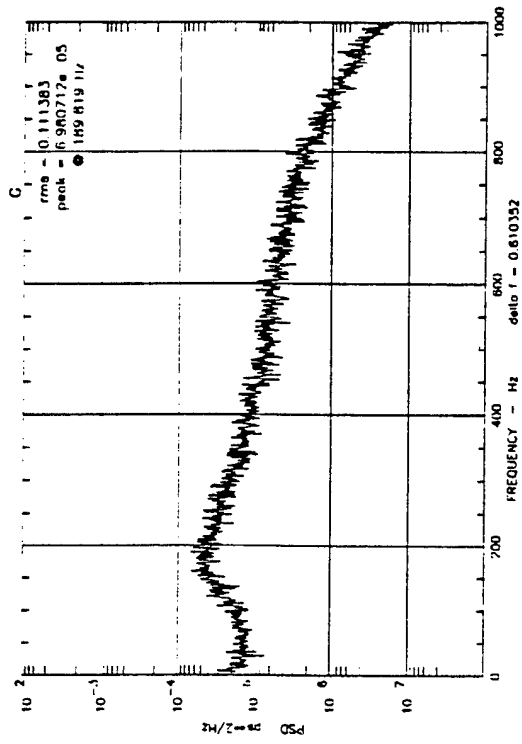
F 15 TPN 2873; alpha=28 beta= 4 bp=0

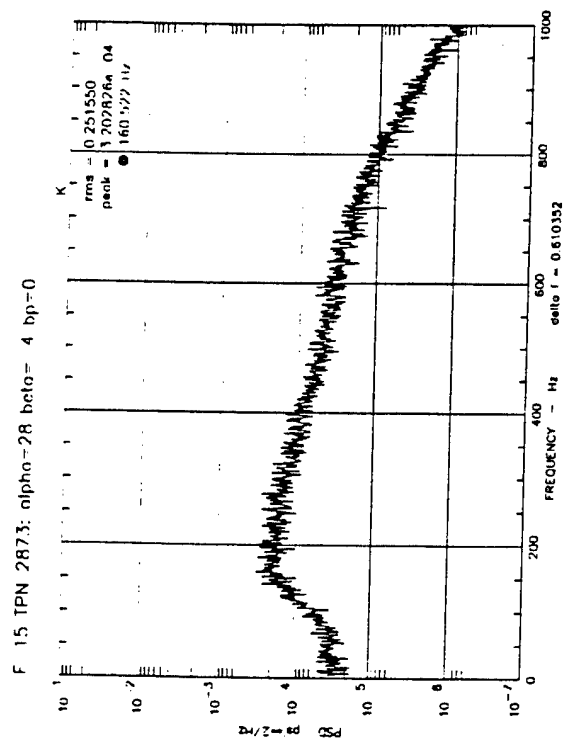
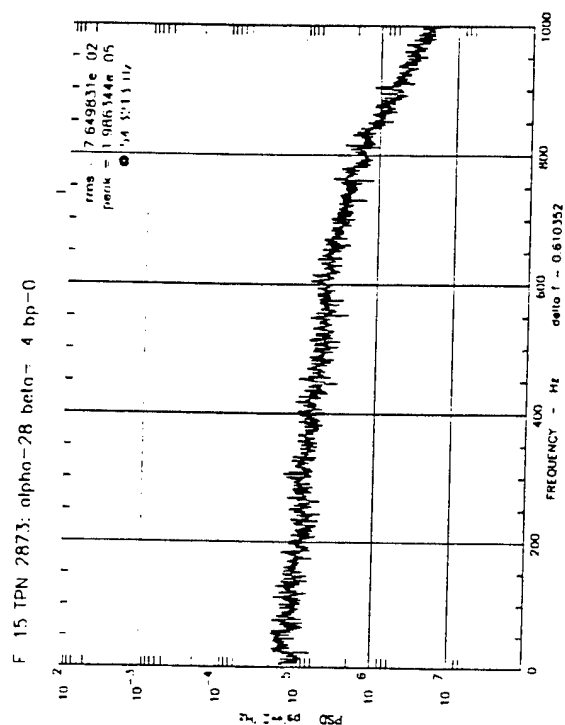
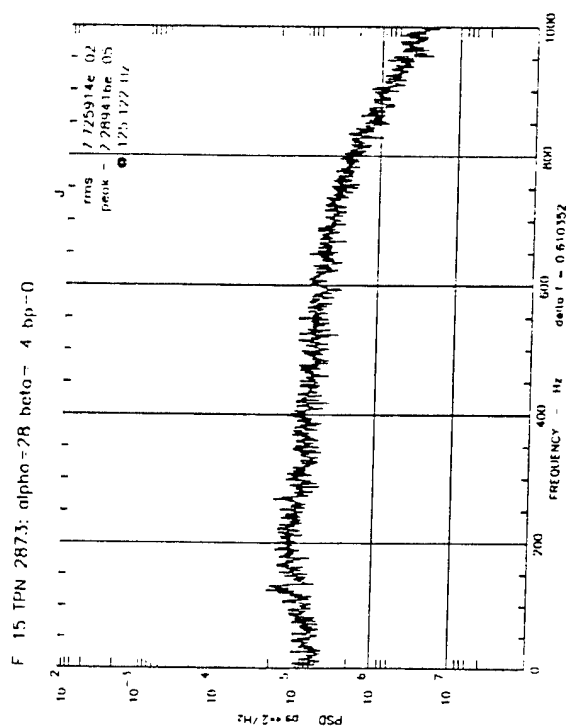


F 15 TPN 2873; alpha=28 beta= 4 bp=0

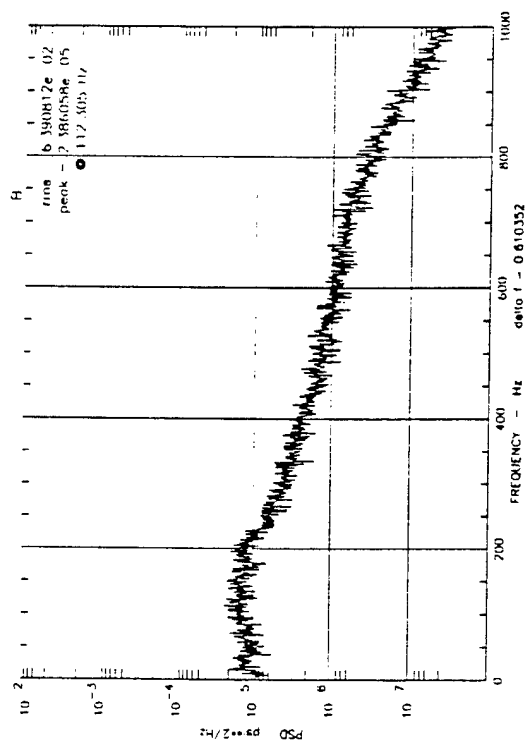


F 15 TPN 2873; alpha=28 beta= 4 bp=0

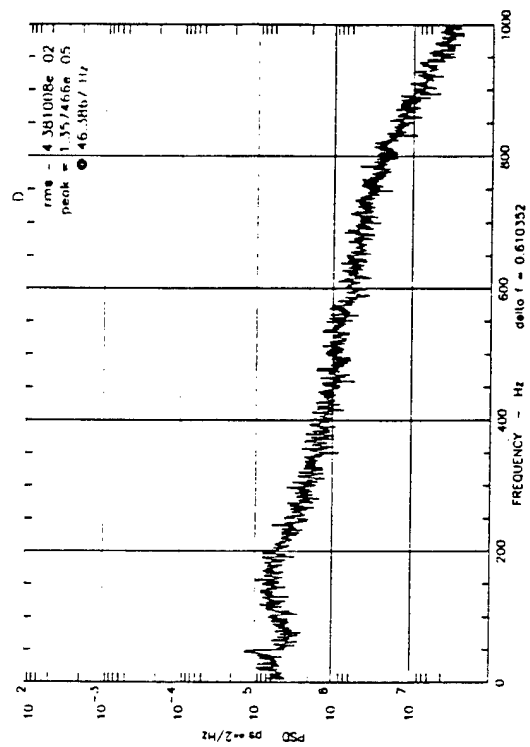




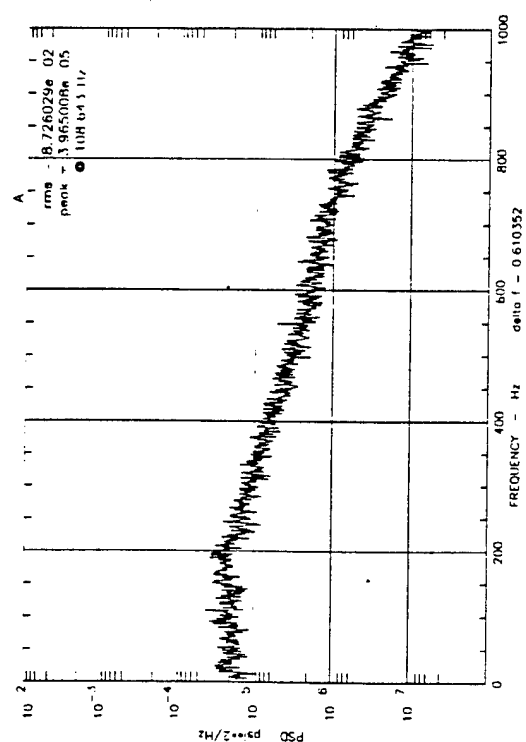
F 15 TPN 2874; alpha=32 beta= 4 bp=0



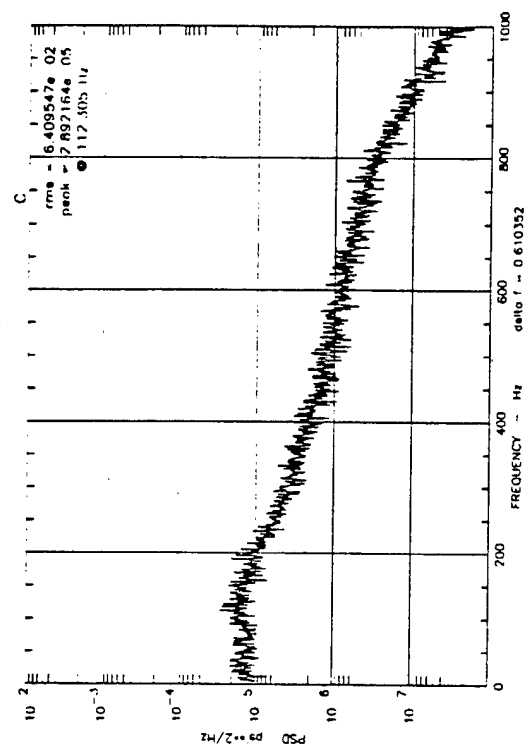
F 15 TPN 2874; alpha=32 beta= 4 bp=0



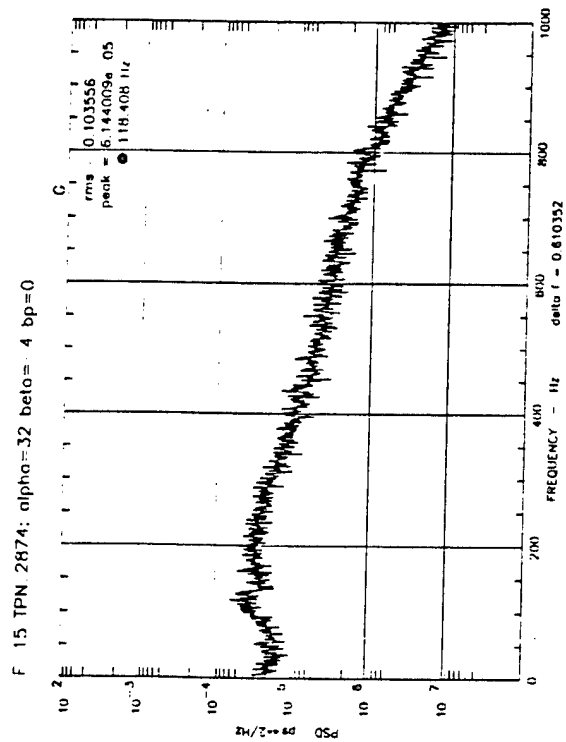
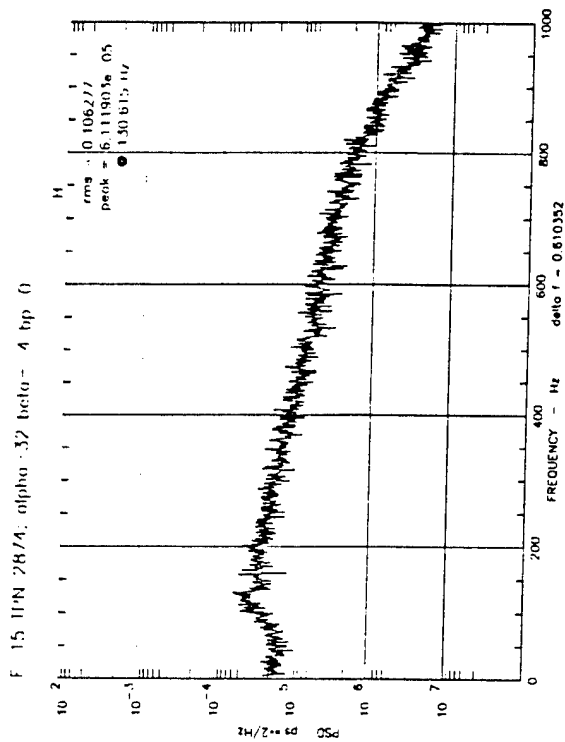
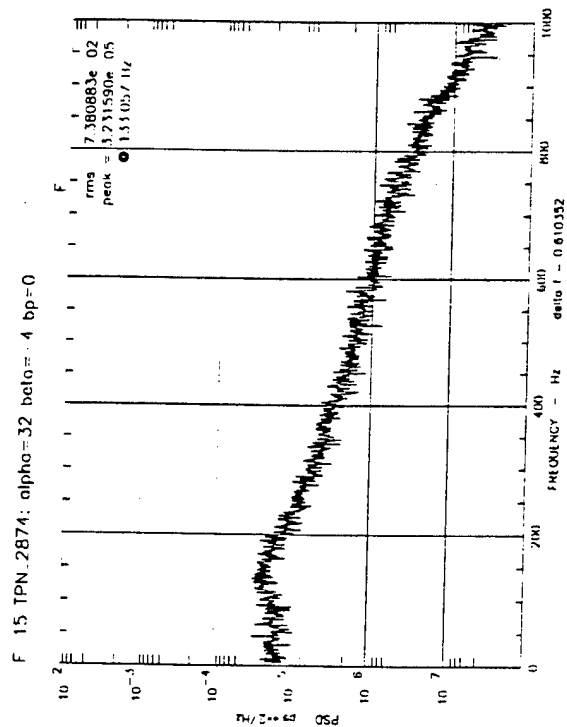
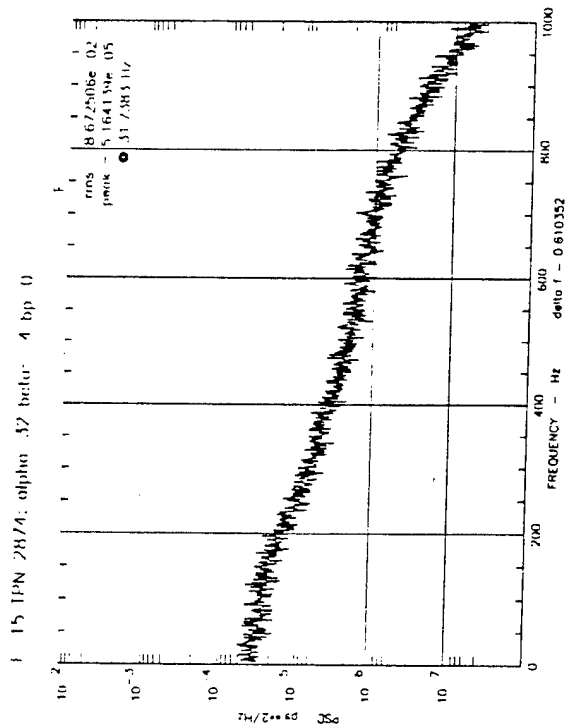
F 15 TPN 2874; alpha=32 beta= 4 bp=0

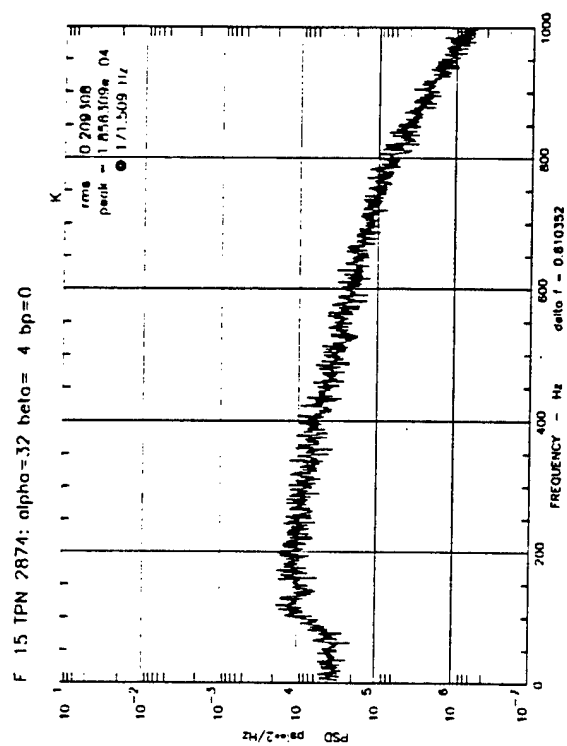
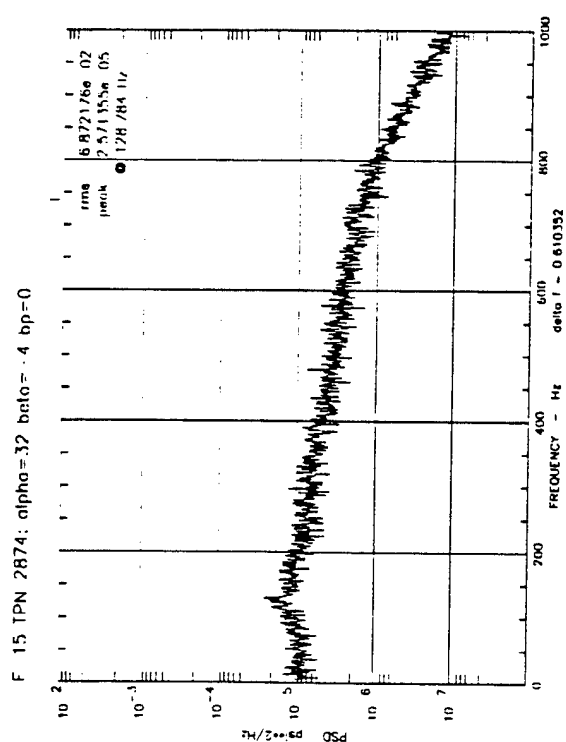
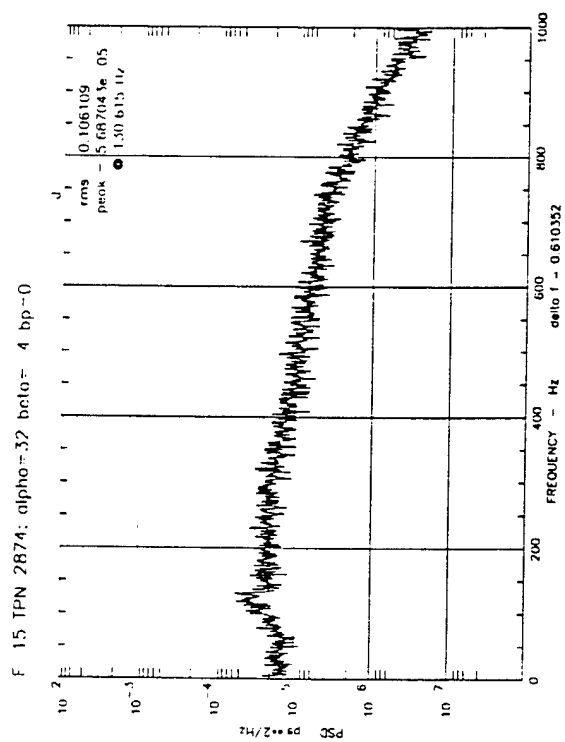


F 15 TPN 2874; alpha=32 beta= 4 bp=0

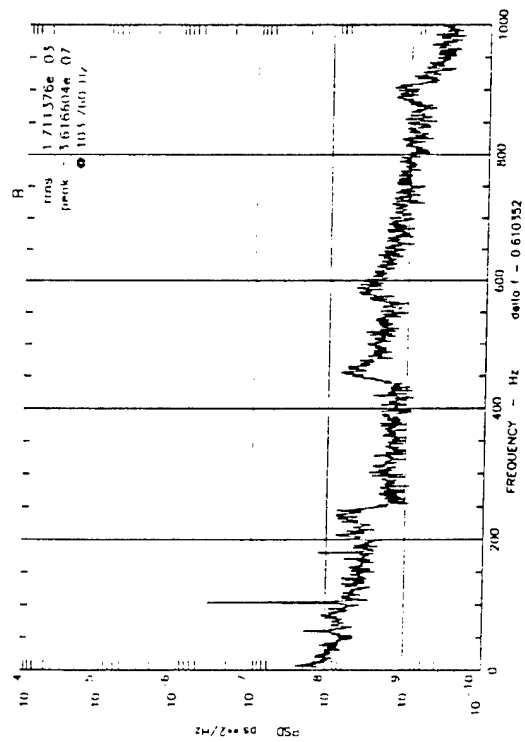




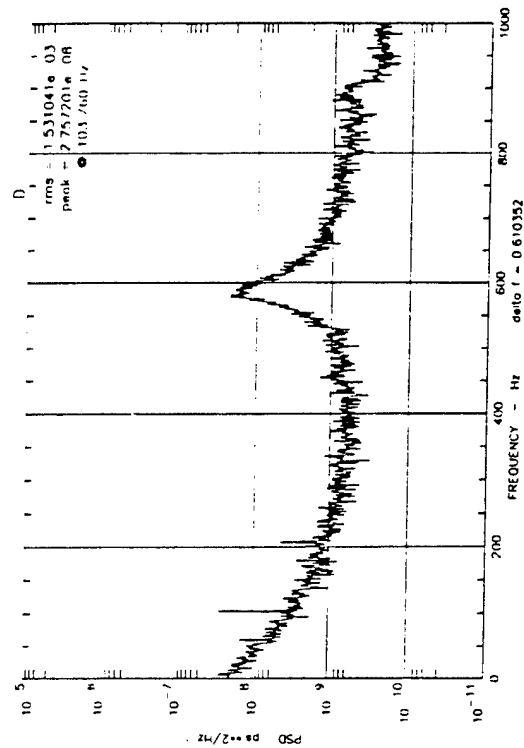




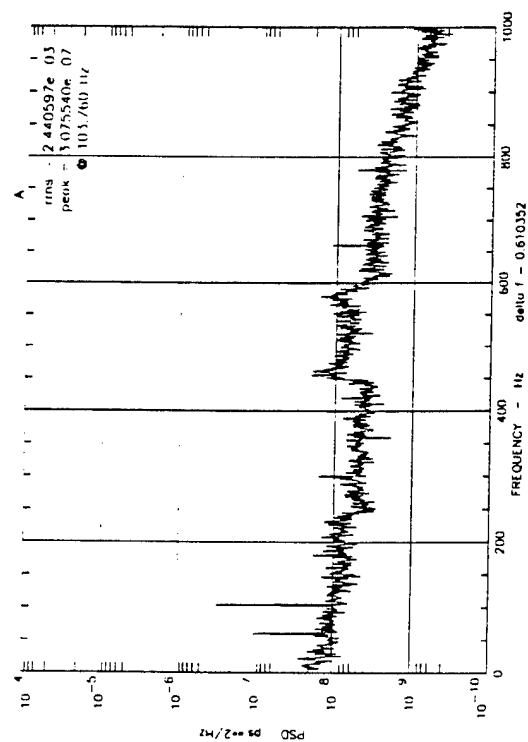
F 15 IPN 3351: alpha-8 beta-4 bp=45



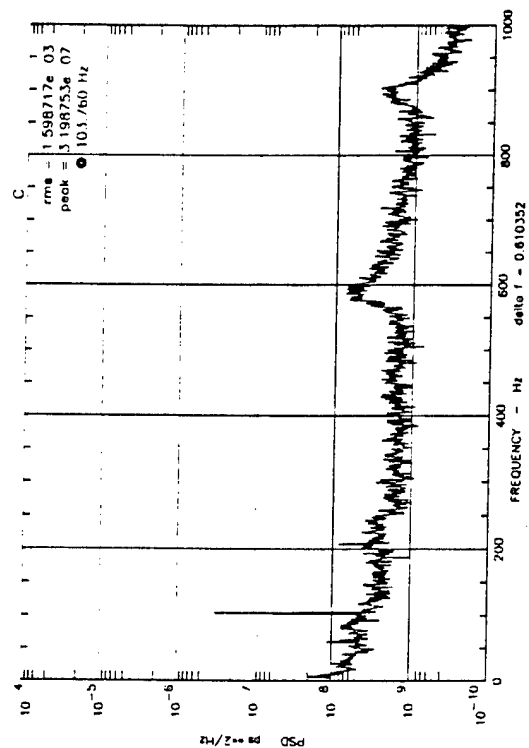
F 15 IPN 3351: alpha-8 beta-4 bp=45



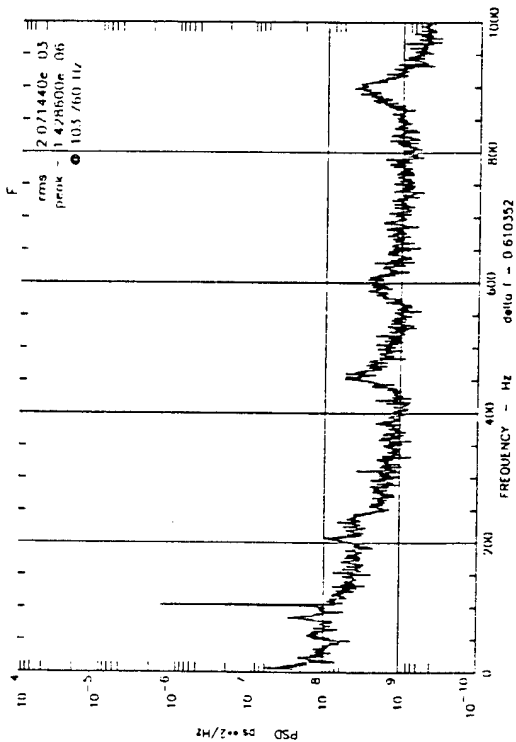
F 15 IPN 3351: alpha-8 beta-4 bp=45



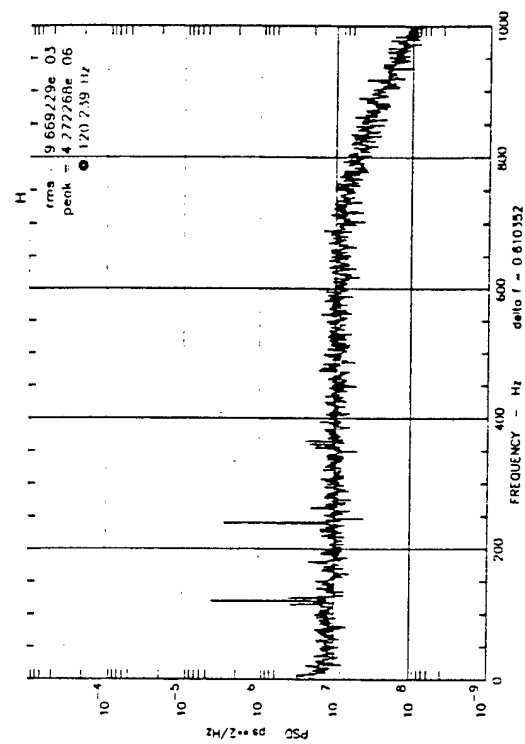
F 15 IPN 3351: alpha-8 beta-4 bp=45



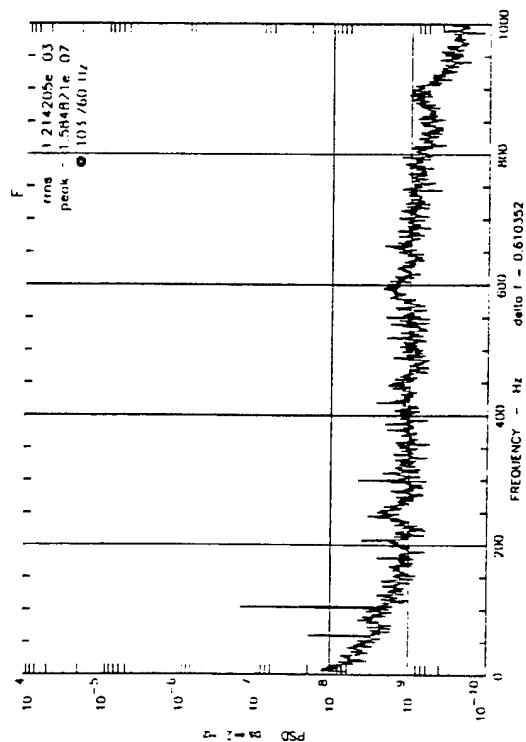
F 15 TPN 3351: alpha=8 beta=4 bp=45



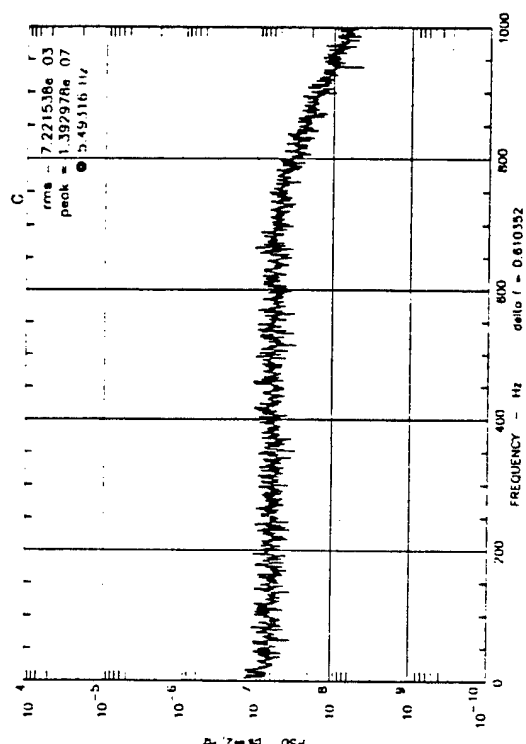
F 15 TPN 3351: alpha=8 beta=4 bp=45



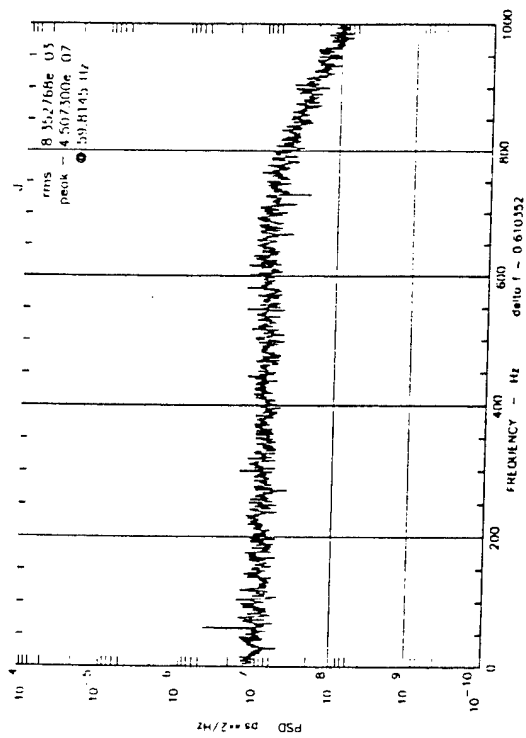
F 15 TPN 3351: alpha=8 beta=4 bp=45



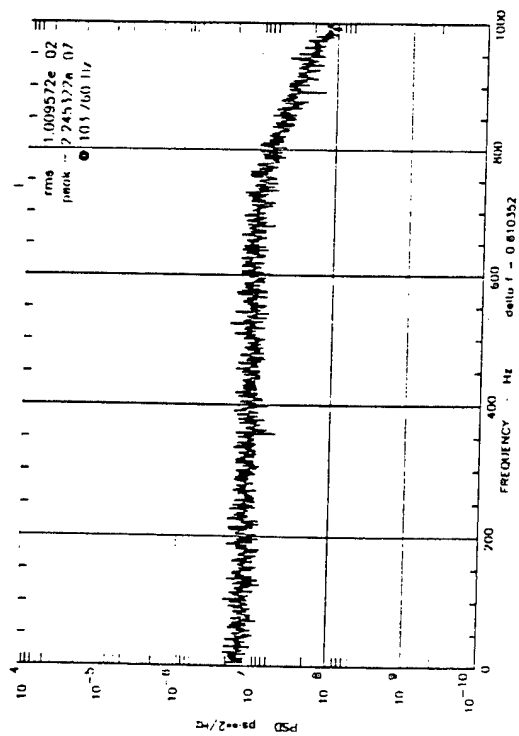
F 15 TPN 3351: alpha=8 beta=4 bp=45



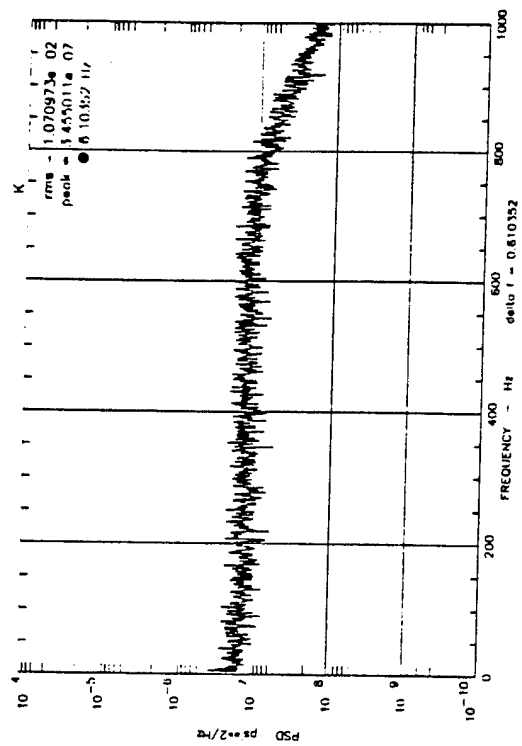
F 15 TPN 3351: alpha=8 beta=4 bp=45

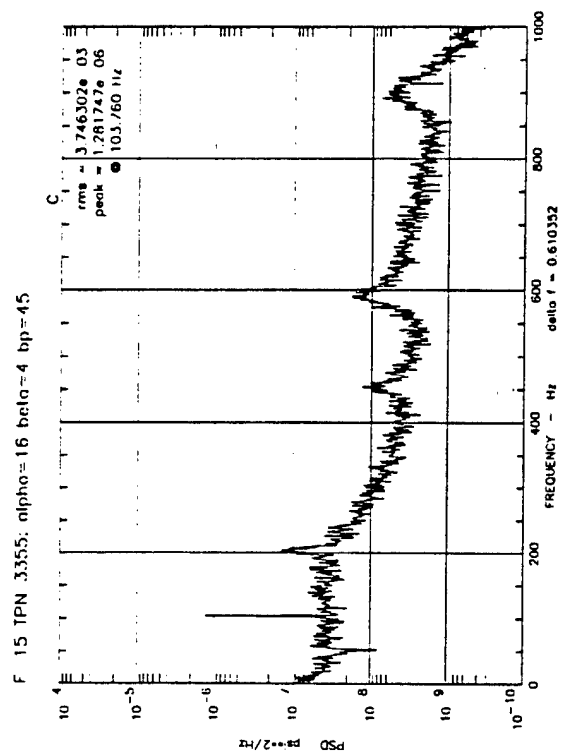
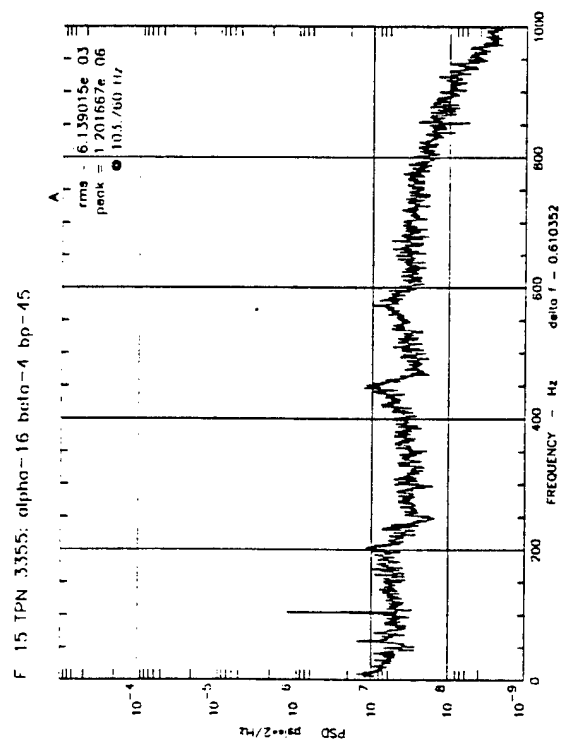
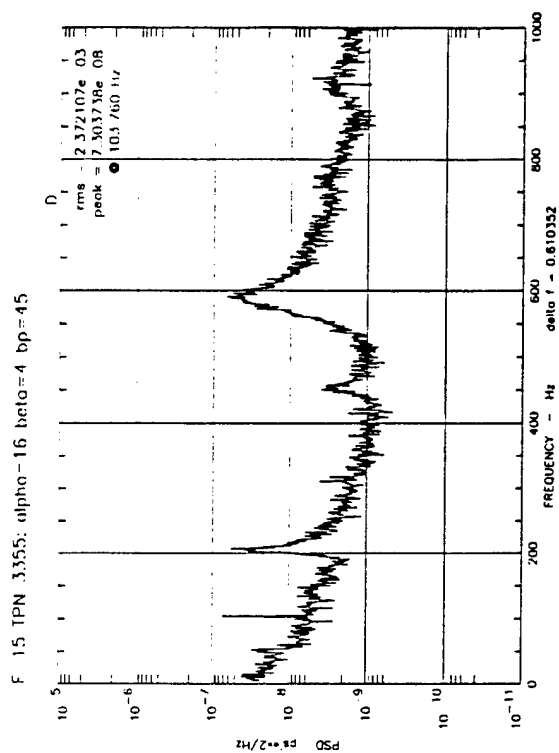
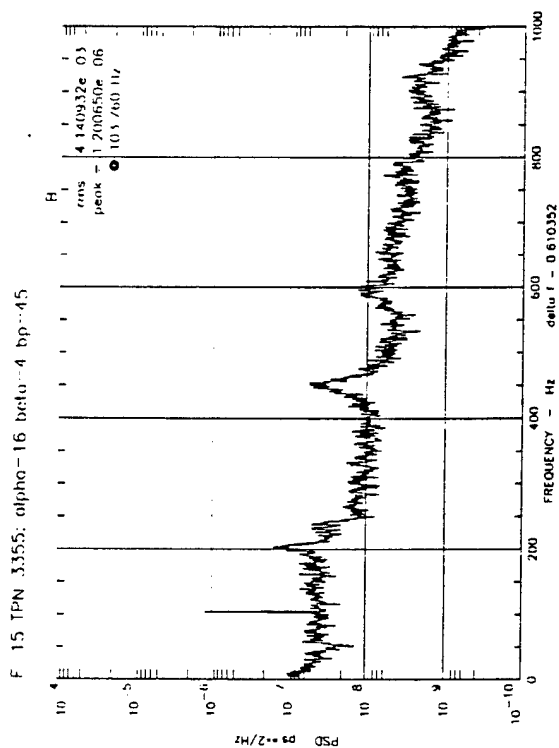


F 15 TPN 3351: alpha=8 beta=4 bp=45

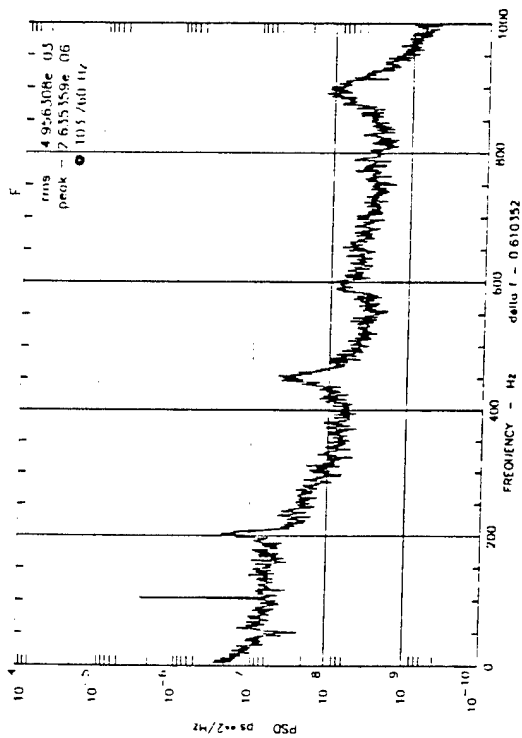


F 15 TPN 3351: alpha=8 beta=4 bp=45

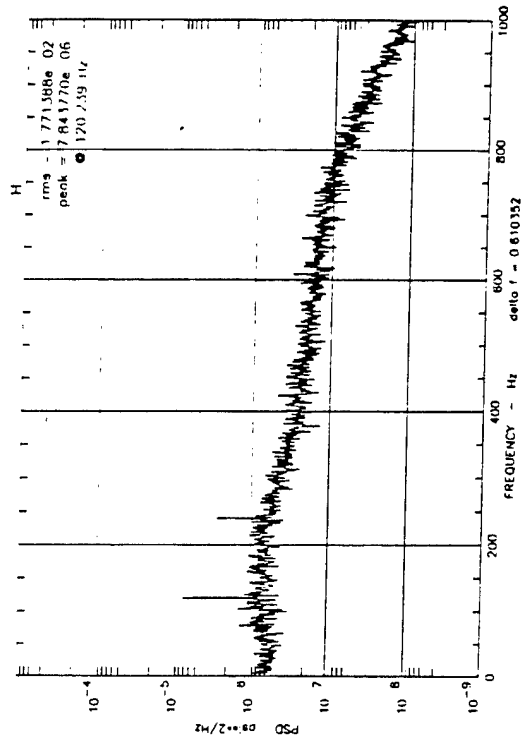




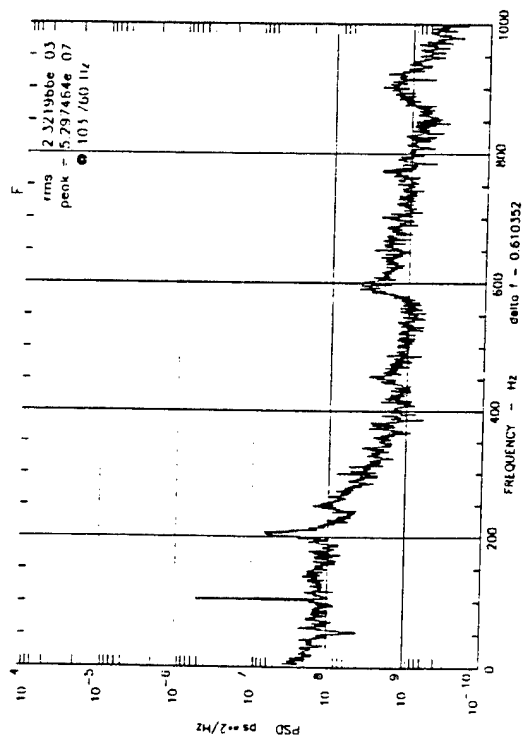
F 15 TPN 3355; alpha=16 beta=4 bp=45



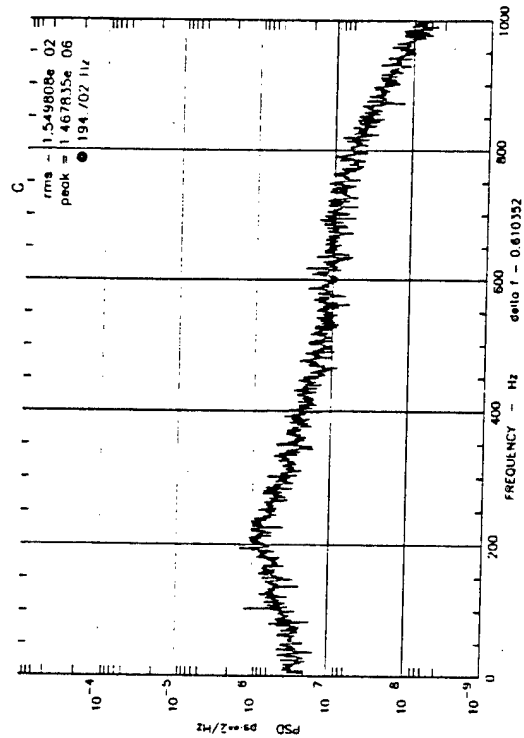
F 15 TPN 3355; alpha=16 beta=4 bp=45



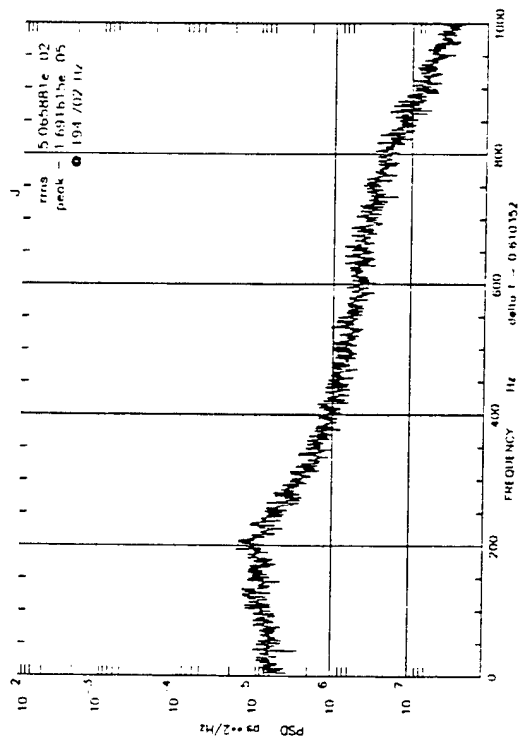
F 15 TPN 3355; alpha=16 beta=4 bp=45



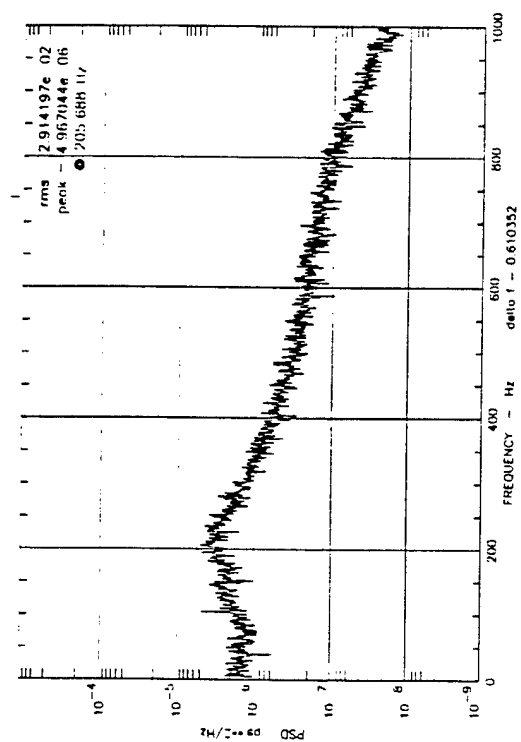
F 15 TPN 3355; alpha=16 beta=4 bp=45



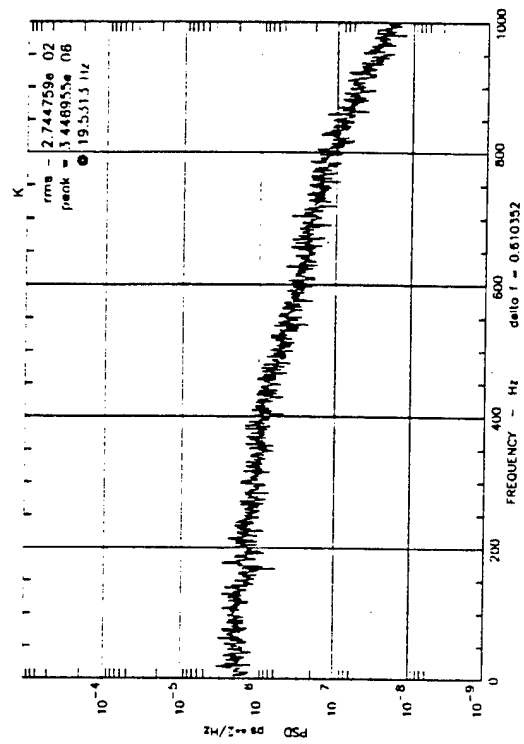
F 15 TPN 3355: alpha=16 beta=4 bp=45



F 15 TPN 3355: alpha=16 beta=4 bp=45

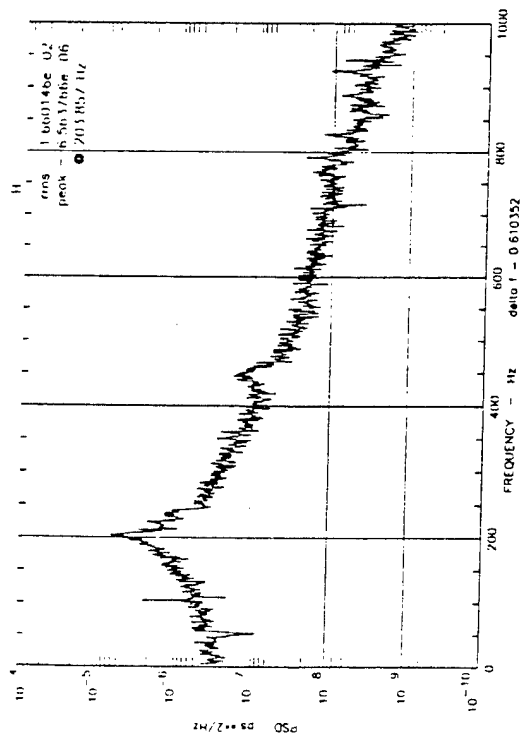


F 15 TPN 3355: alpha=16 beta=4 bp=45

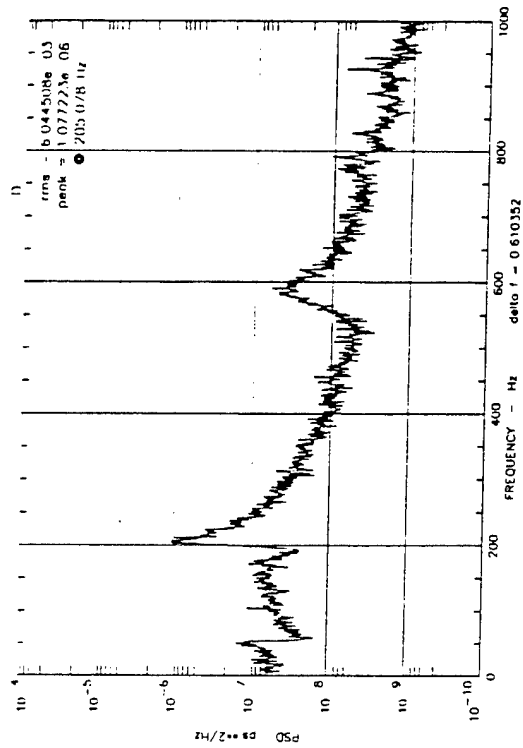




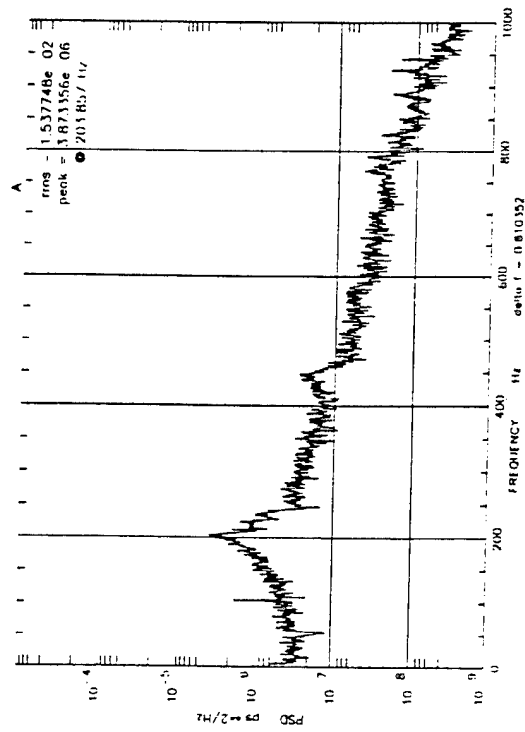
F 15 TPN 3357: alpha=20 beta=4 bp=45



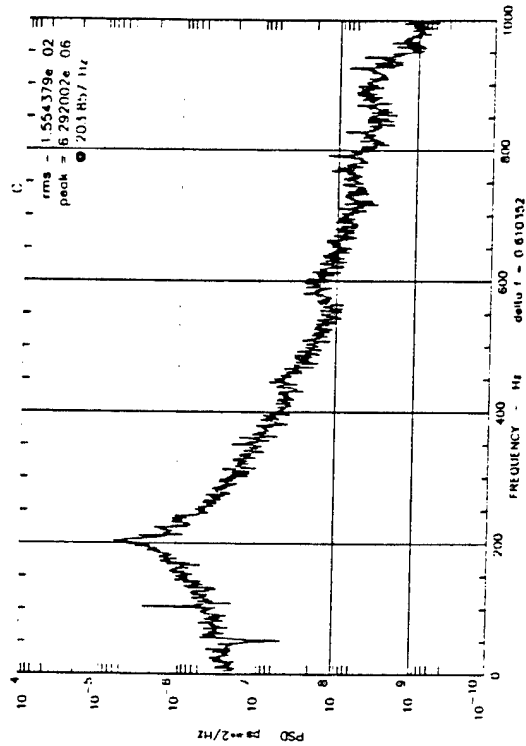
F 15 TPN 3357: alpha=20 beta=4 bp=45



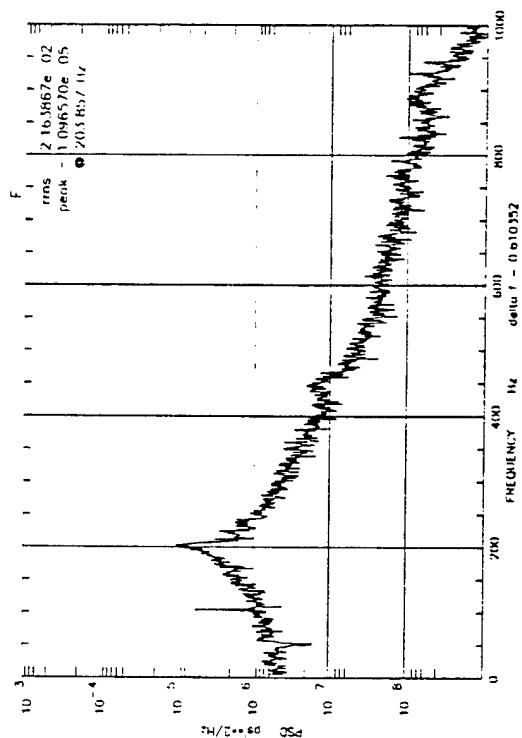
F 15 TPN 3357: alpha=20 beta=4 bp=45



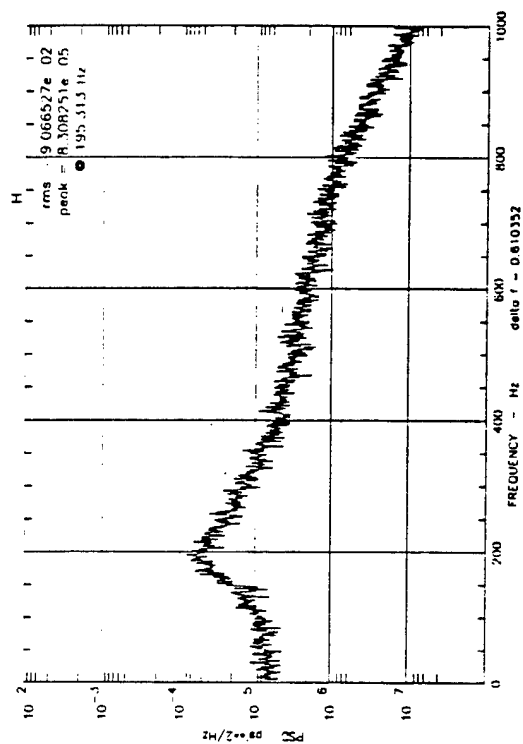
F 15 TPN 3357: alpha=20 beta=4 bp=45



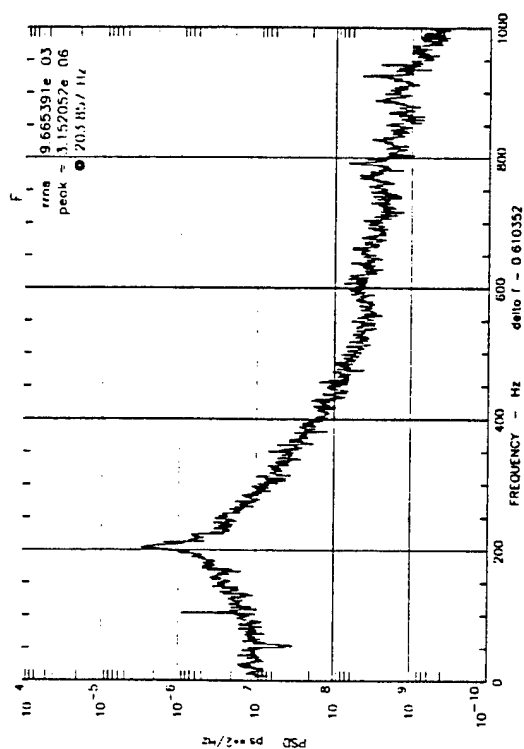
F 15 IPN 3357: alpha-20 beta-4 bp-45



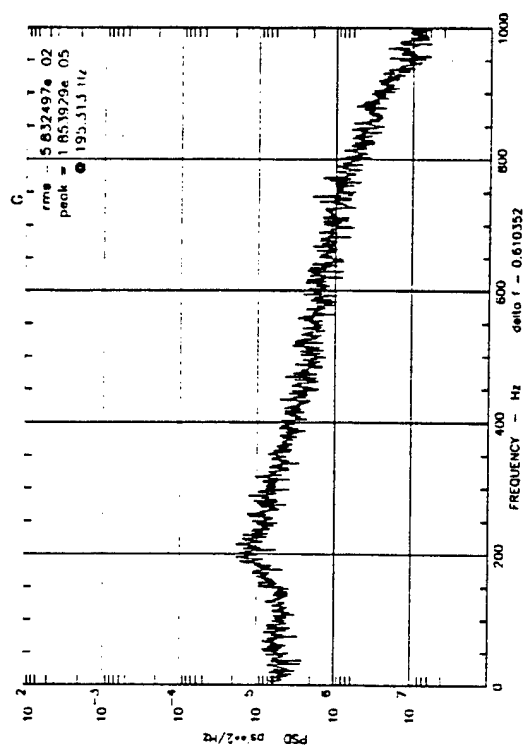
F 15 IPN 3357: alpha-20 beta-4 bp-45



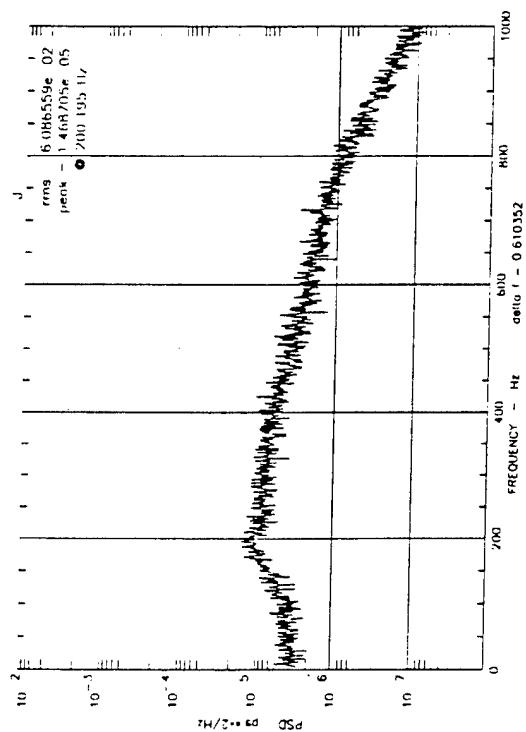
F 15 IPN 3357: alpha-20 beta-4 bp-45



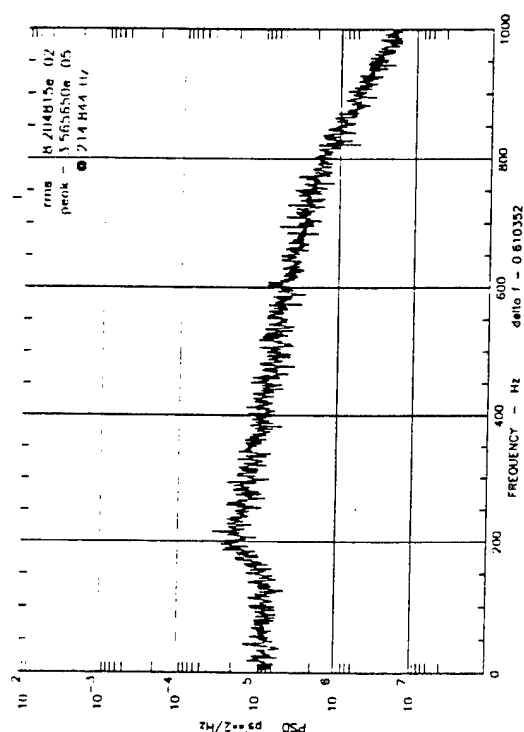
F 15 IPN 3357: alpha-20 beta-4 bp-45



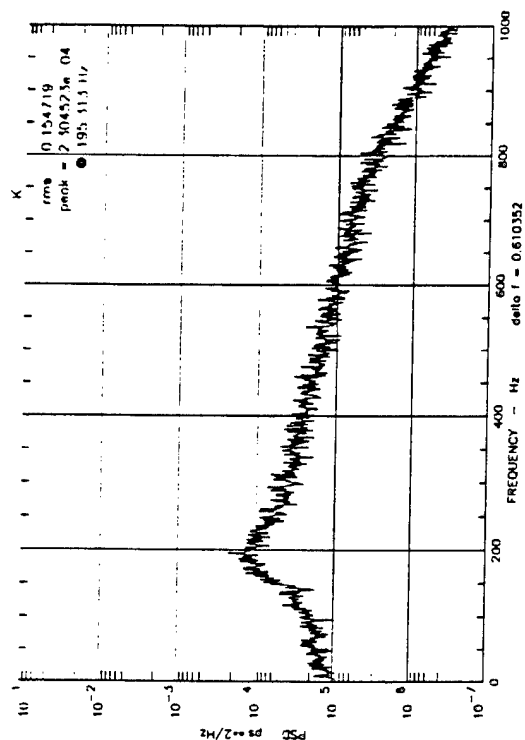
F 15 TPN 3357; alpha=20 beta=4 bp=45



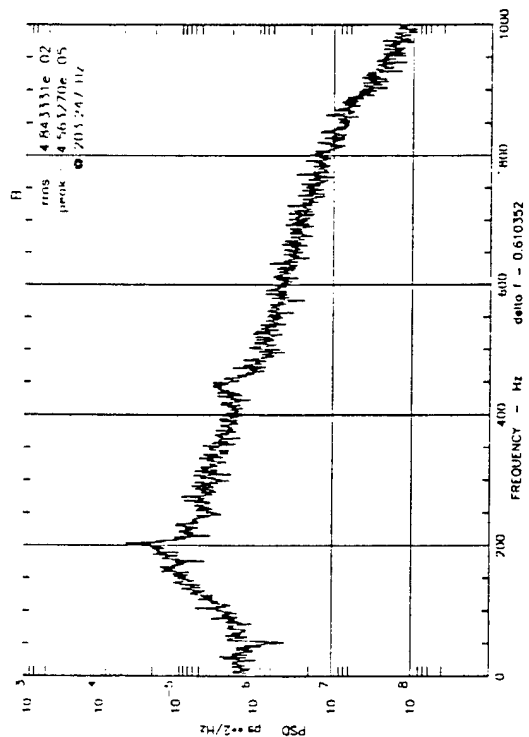
F 15 TPN 3357; alpha=20 beta=4 bp=45



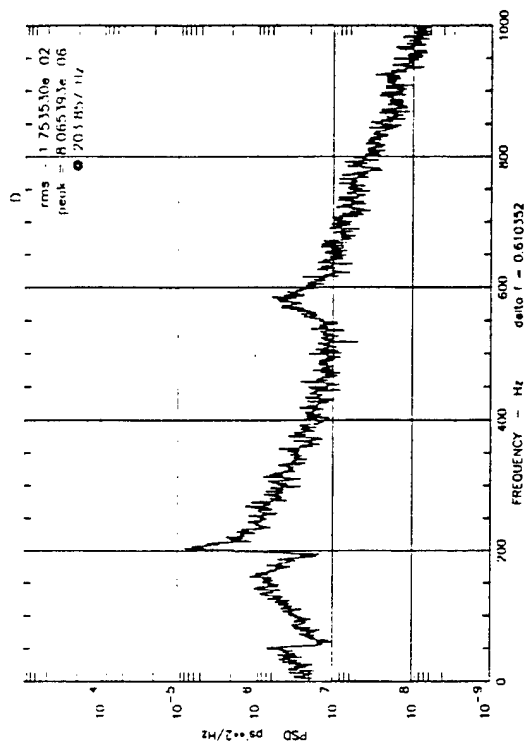
F 15 TPN 3357; alpha=20 beta=4 bp=45



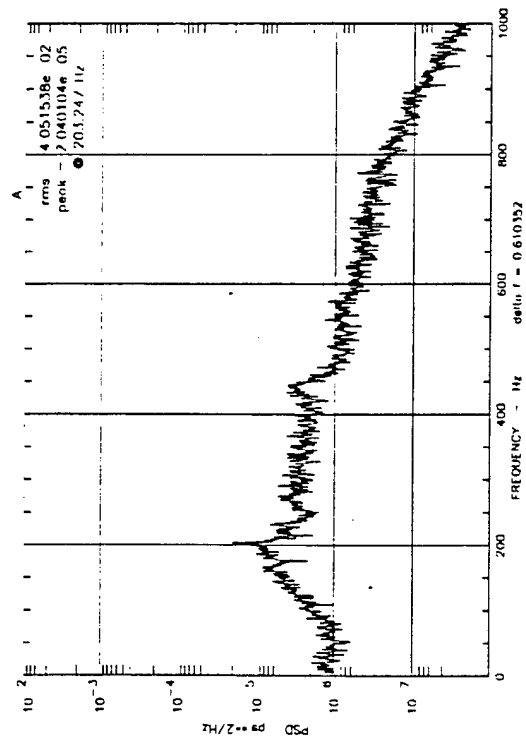
F 15 TPN 3359: alpha-24 beta-4 bp-45



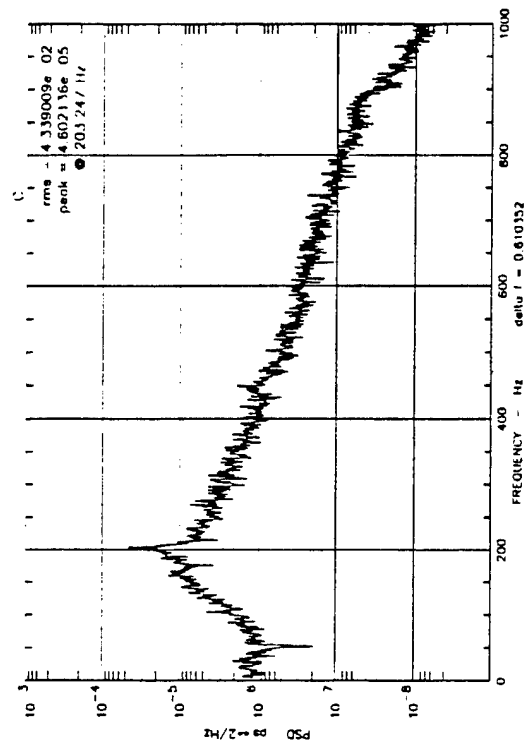
F 15 TPN 3359: alpha-24 beta-4 bp-45



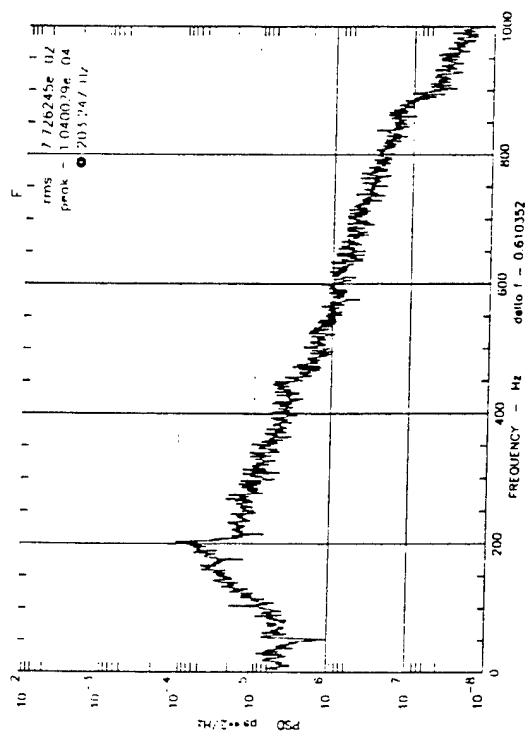
F 15 TPN 3359: alpha-24 beta-4 bp-45



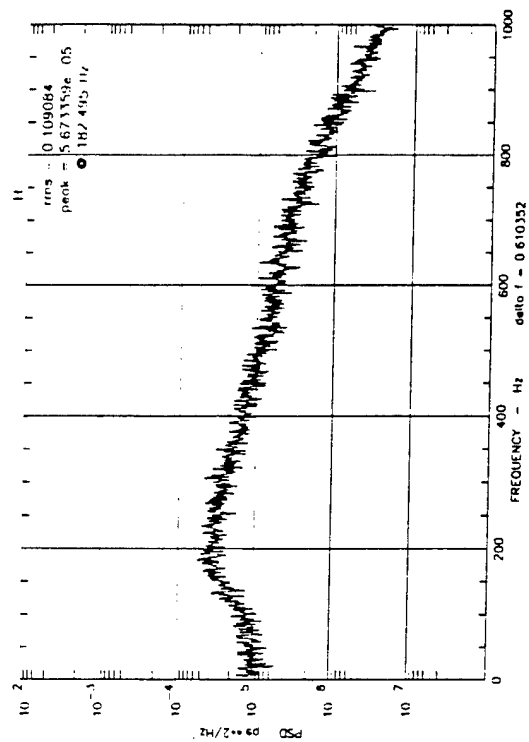
F 15 TPN 3359: alpha-24 beta-4 bp-45



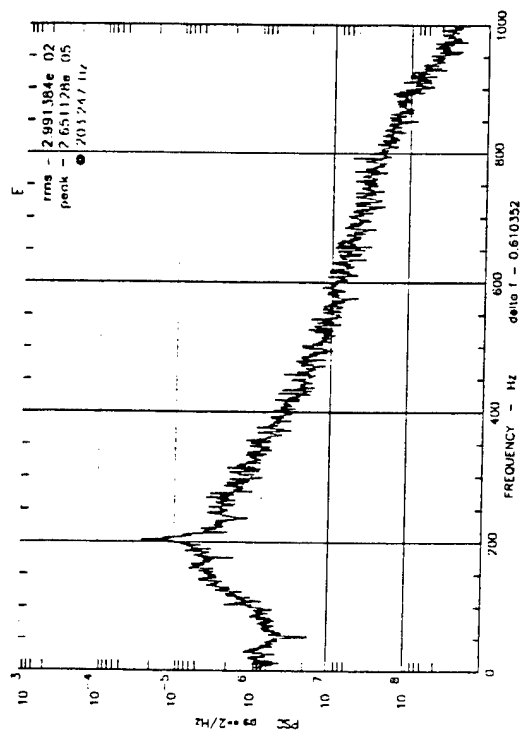
F 15 TPN 3359: alpha=24 beta=4 bp=45



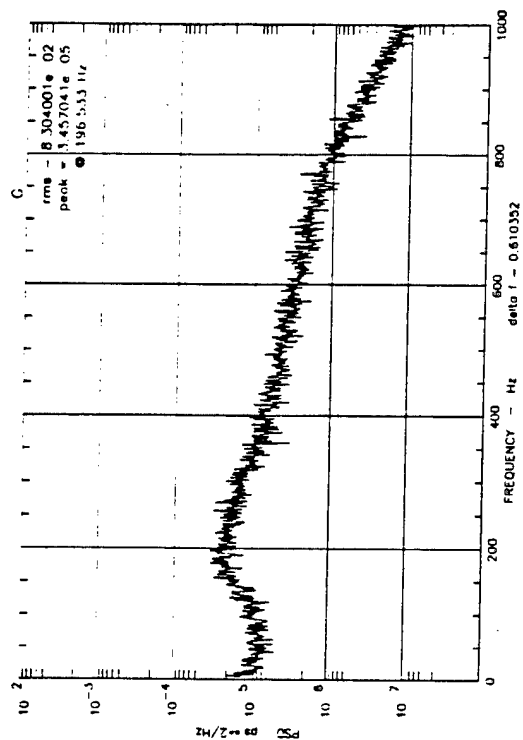
F 15 TPN 3359: alpha=24 beta=4 bp=45



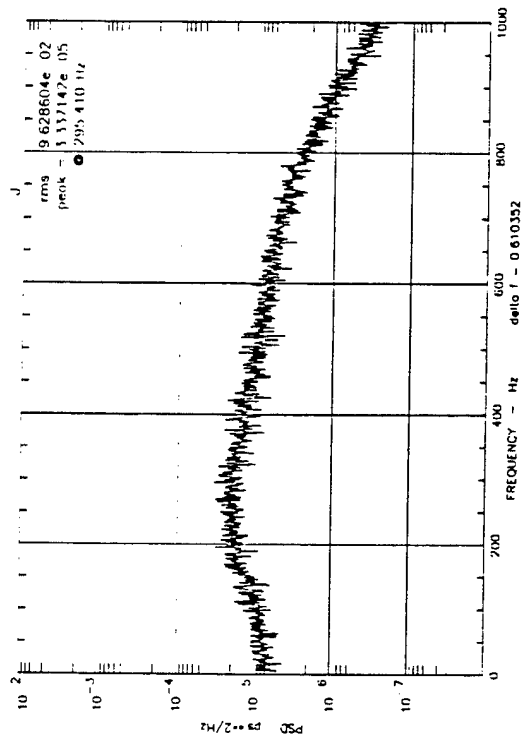
F 15 TPN 3359: alpha=24 beta=4 bp=45



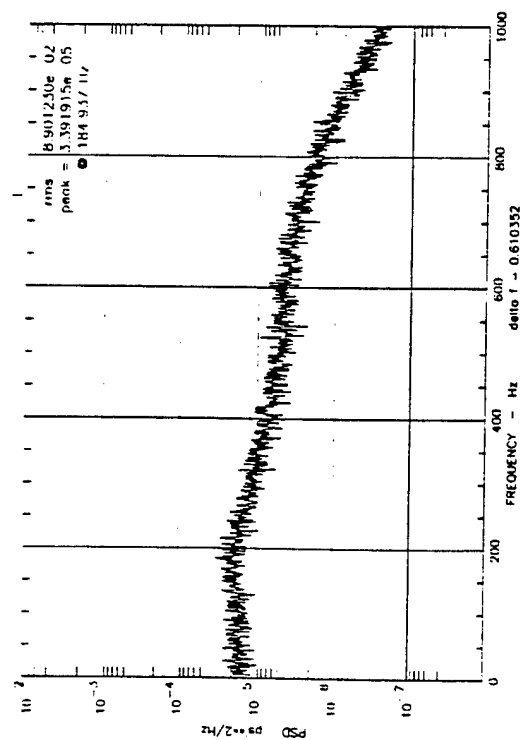
F 15 TPN 3359: alpha=24 beta=4 bp=45



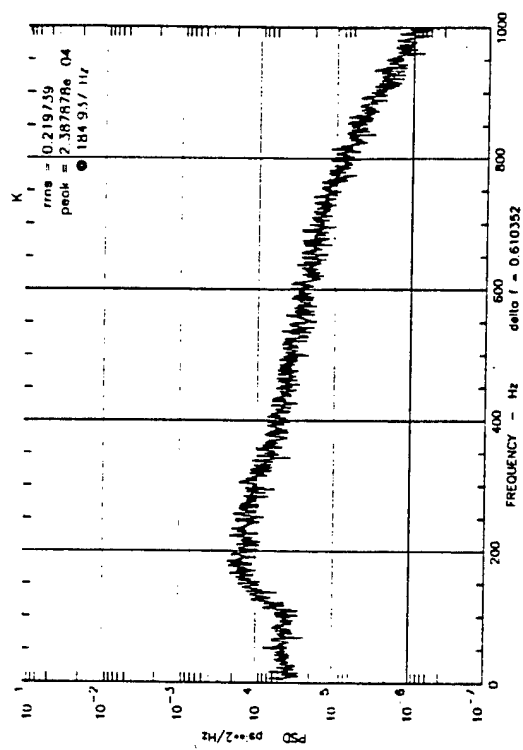
F 15 TPN 3359: alpha=24 beta=4 bp=45



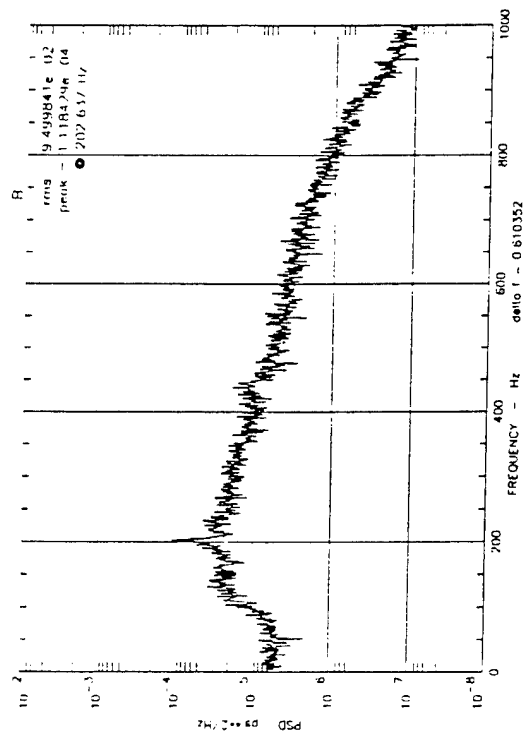
F 15 TPN 3359: alpha=24 beta=4 bp=45



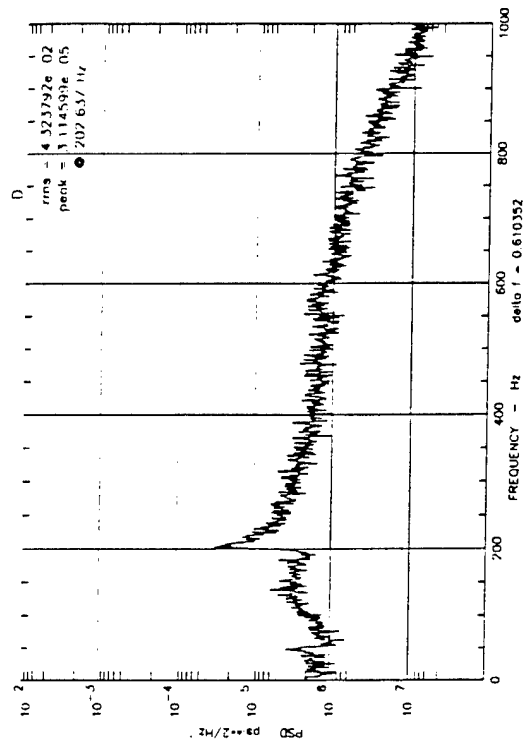
F 15 TPN 3359: alpha=24 beta=4 bp=45



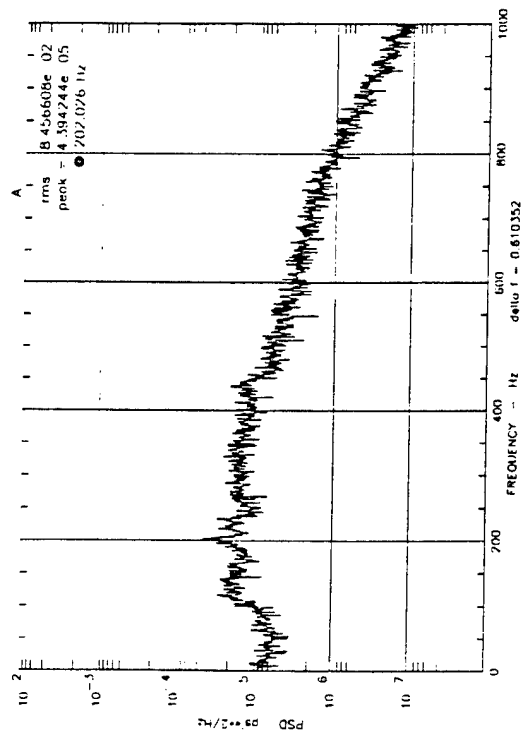
F 15 IPN 3360: alpha=28 beta=4 bp=45



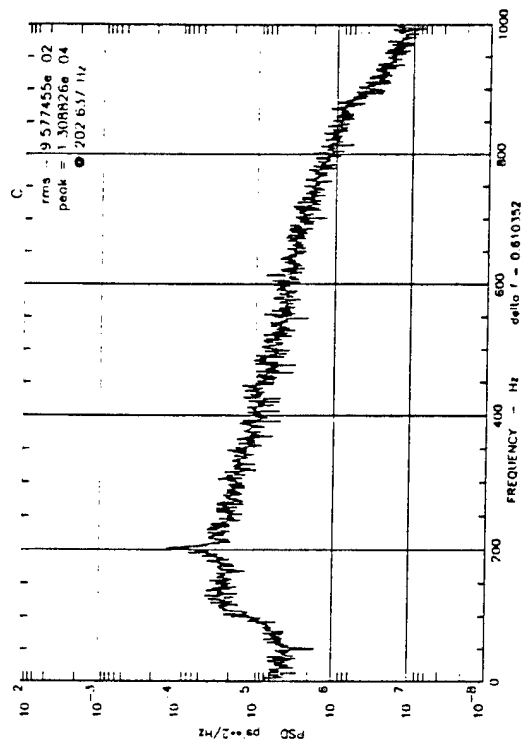
F 15 IPN 3360: alpha=28 beta=4 bp=45



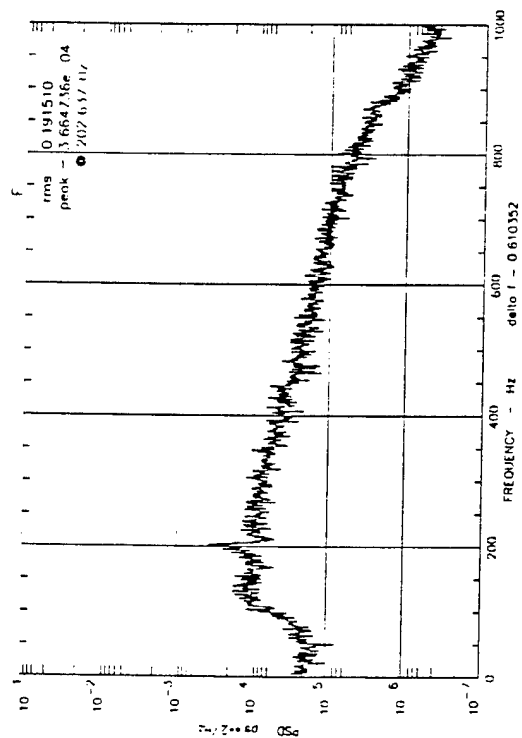
F 15 IPN 3360: alpha=28 beta=4 bp=45



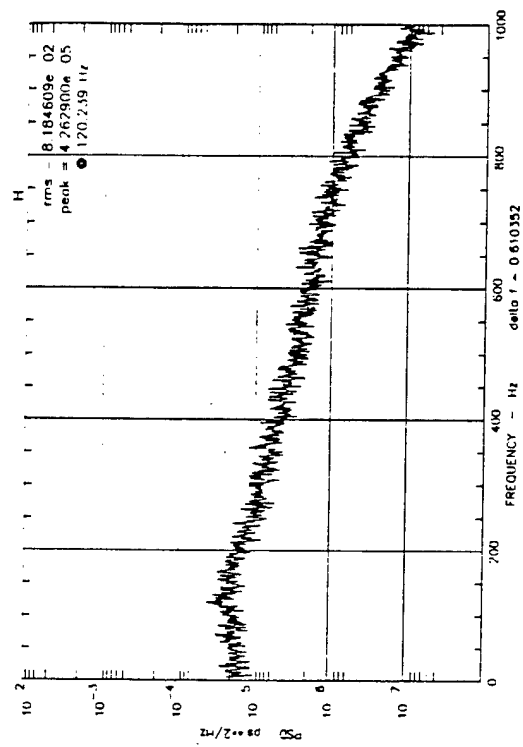
F 15 IPN 3360: alpha=28 beta=4 bp=45



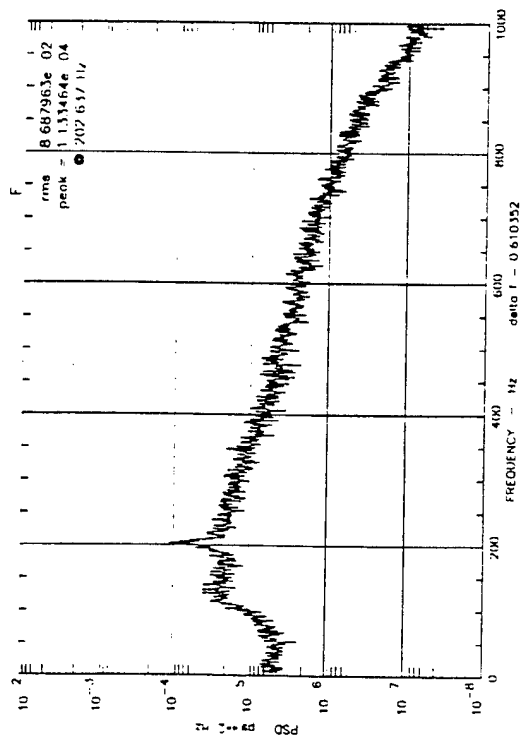
F 15 TPN 3360: alpha=28 beta=4 bp=45



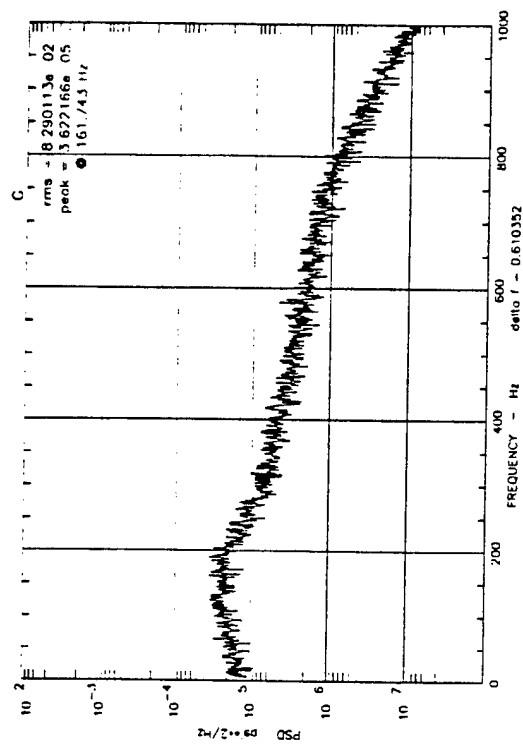
F 15 TPN 3360: alpha=28 beta=4 bp=45



F 15 TPN 3360: alpha=28 beta=4 bp=45

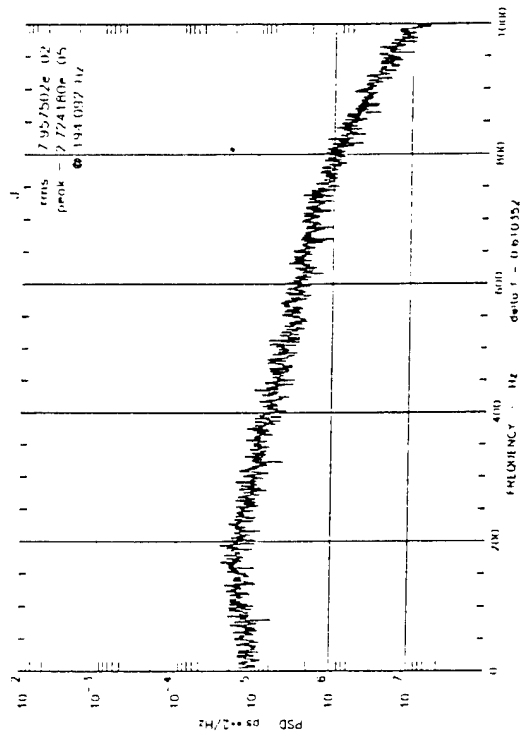


F 15 TPN 3360: alpha=28 beta=4 bp=45

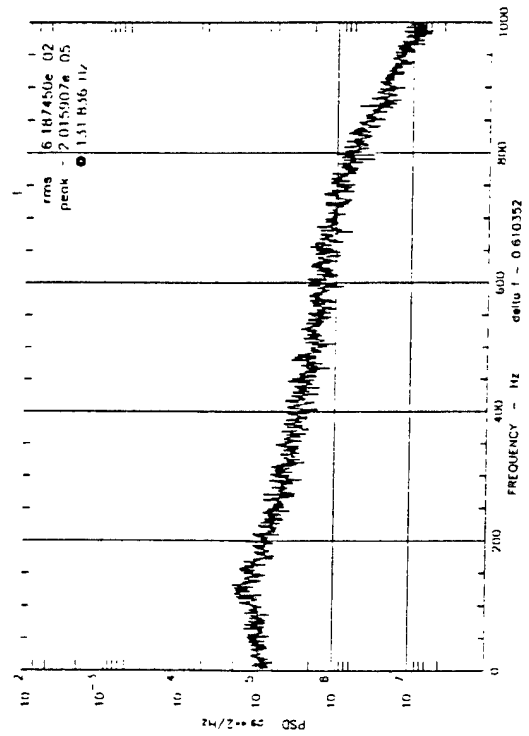




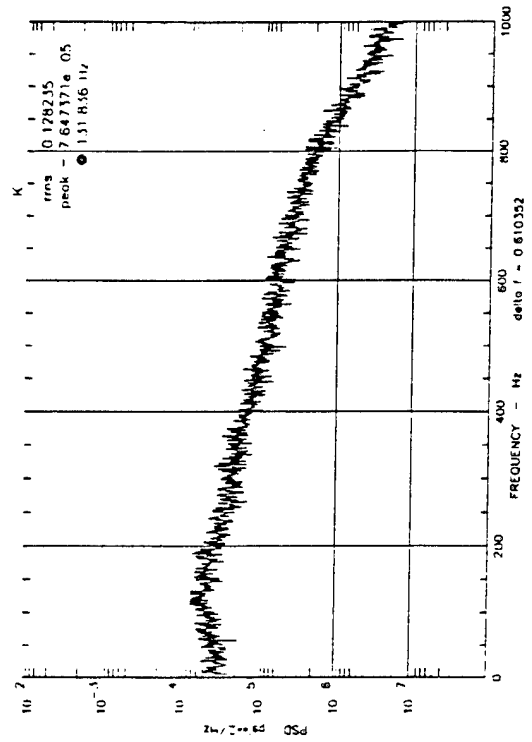
F 15 TPN 3360; alpha-28 beta-4 bp-45



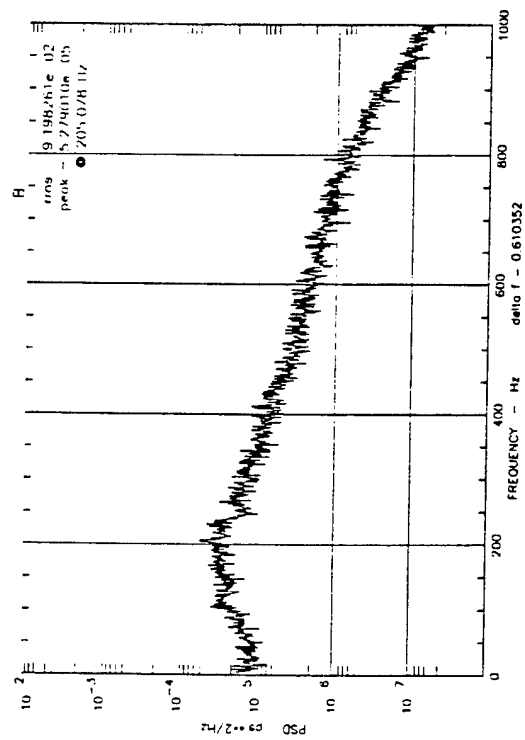
F 15 TPN 3360; alpha 28 beta 4 bp 45



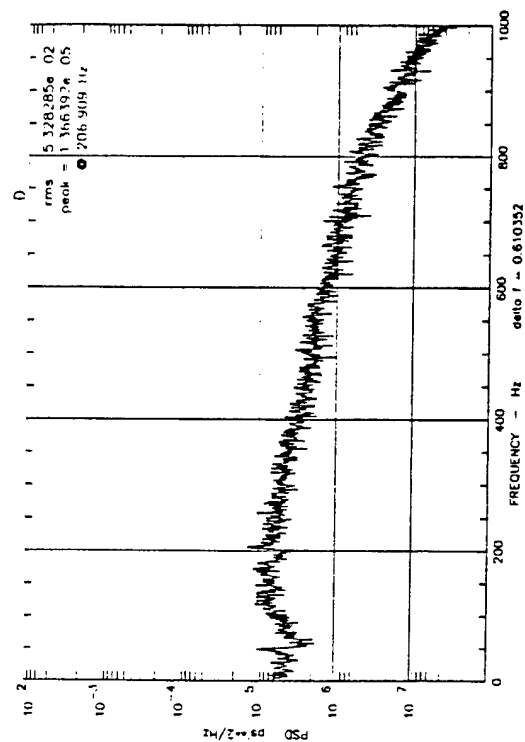
F 15 TPN 3360; alpha-28 beta-4 bp-45



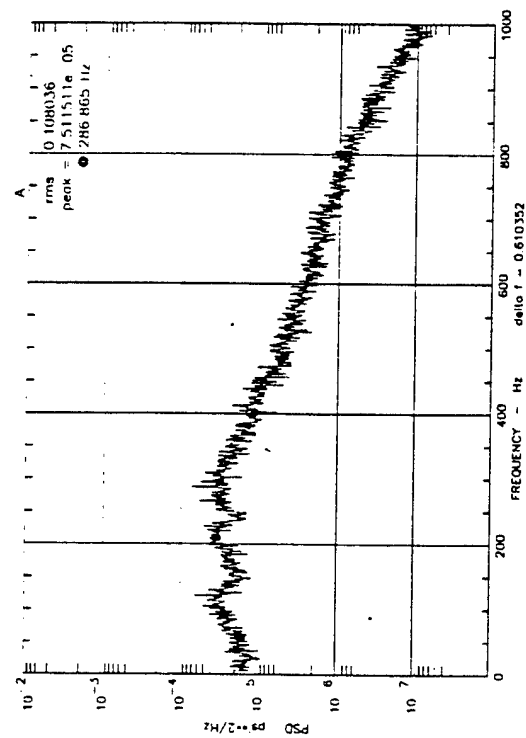
F 15 TPN 3361: alpha=32 beta=4 bp=45



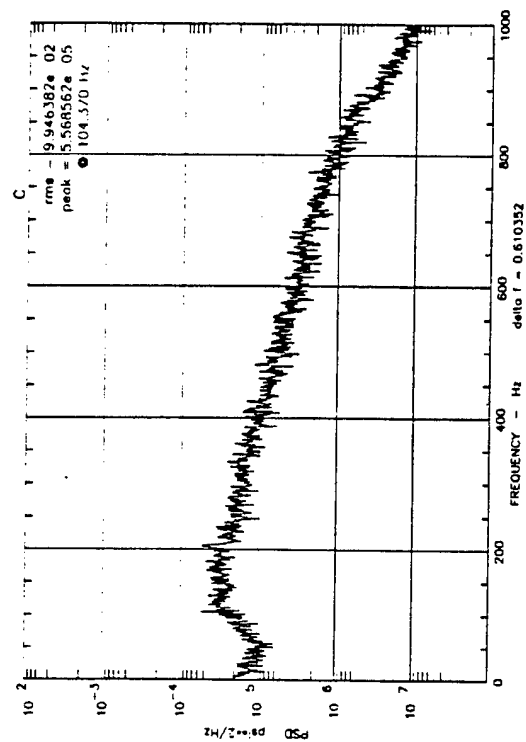
F 15 TPN 3361: alpha=32 beta=4 bp=45



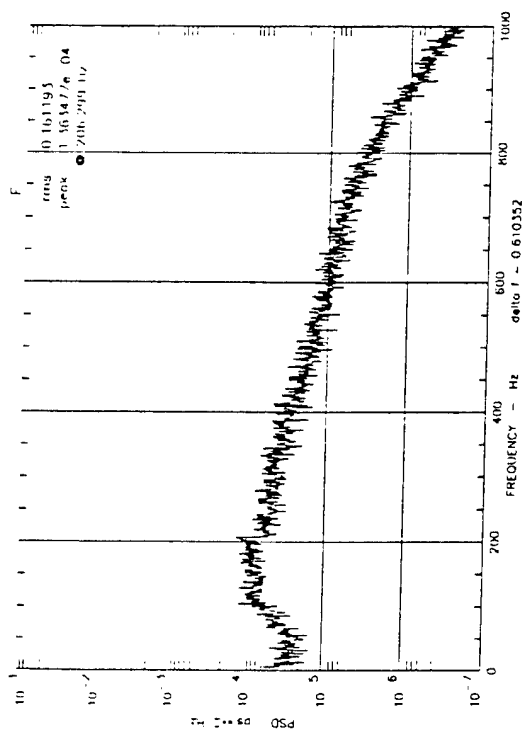
F 15 TPN 3361: alpha=32 beta=4 bp=45



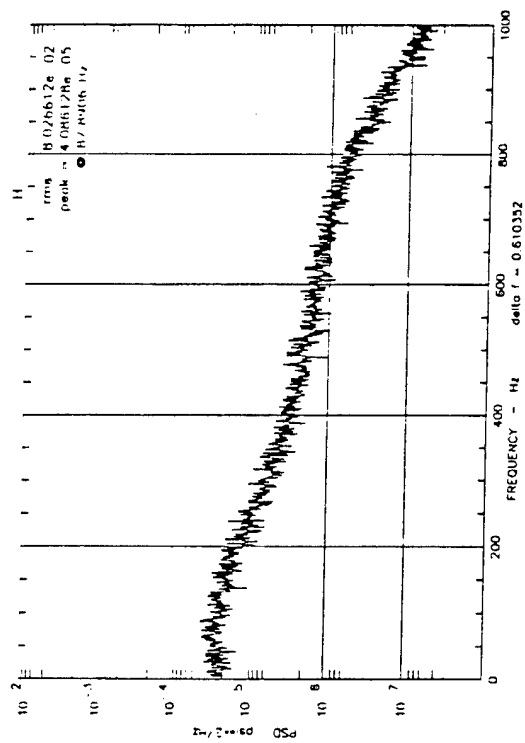
F 15 TPN 3361: alpha=32 beta=4 bp=45



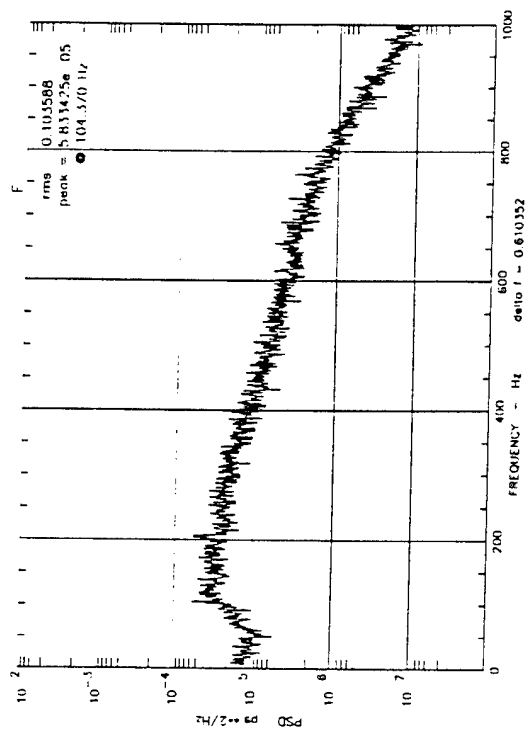
F 15 TPN 3361: alpha=32 beta=4 bp=45



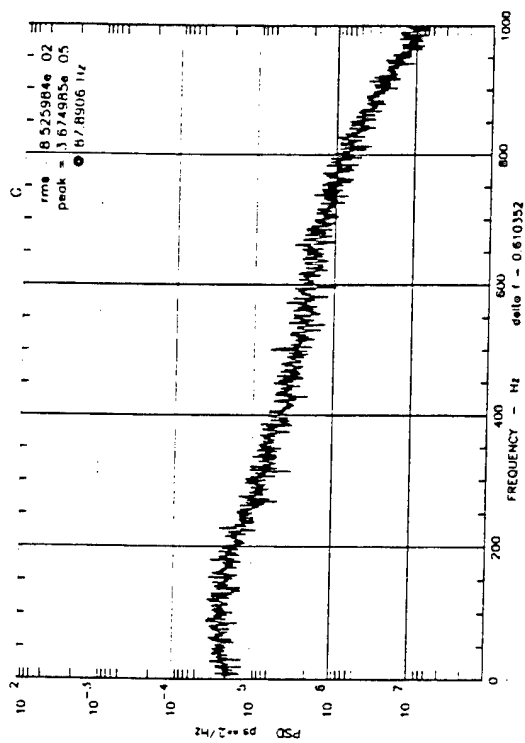
F 15 TPN 3361: alpha=32 beta=4 bp=45



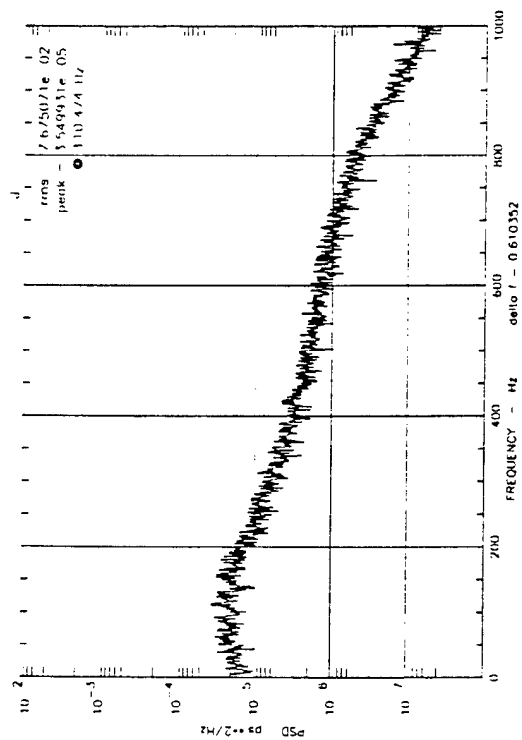
F 15 TPN 3361: alpha=32 beta=4 bp=45



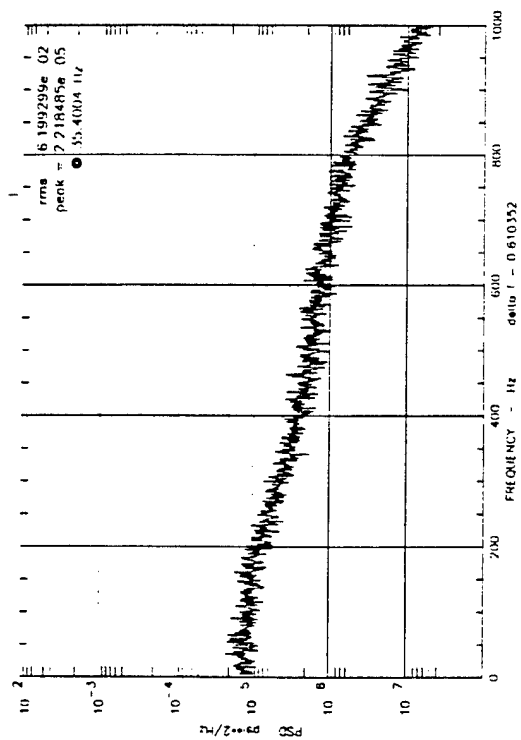
F 15 TPN 3361: alpha=32 beta=4 bp=45



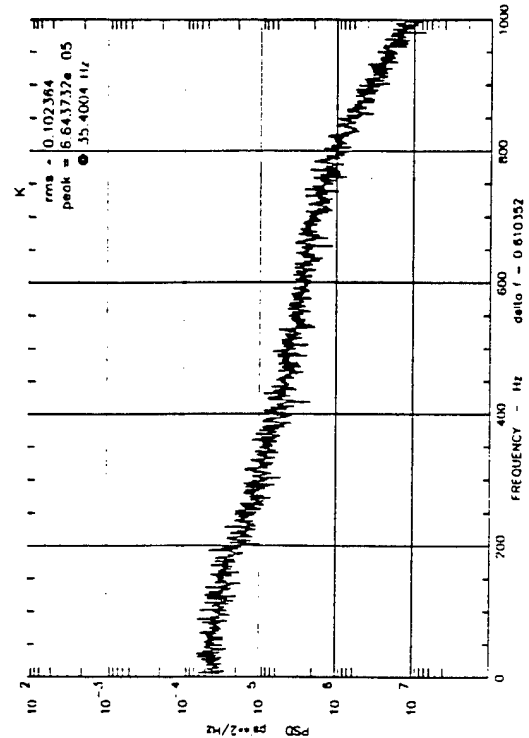
F 15 TPN 3361: alpha=32 beta=4 bp=45



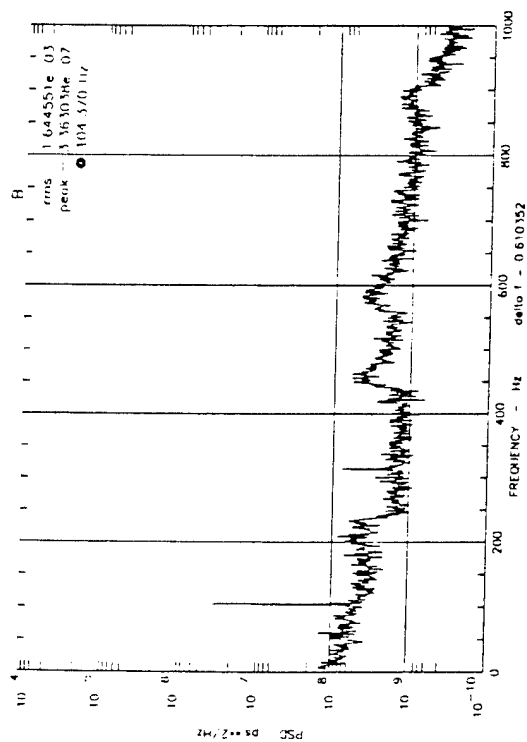
F 15 TPN 3361: alpha=32 beta=4 bp=45



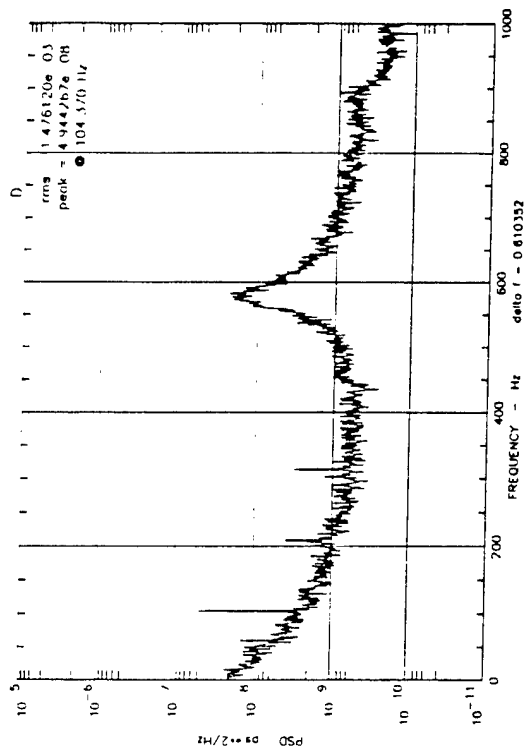
F 15 TPN 3361: alpha=32 beta=4 bp=45



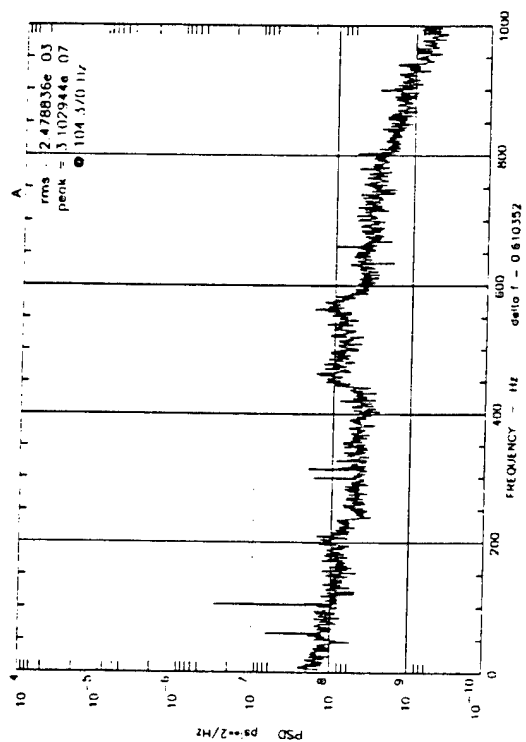
F 15 ITPN 3333: alpha=8 beta=0 bp=45



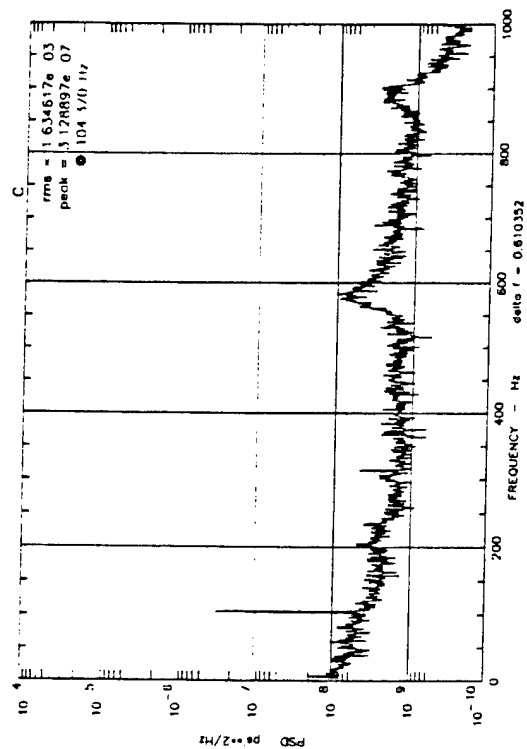
F 15 ITPN 3333: alpha=8 beta=0 bp=45



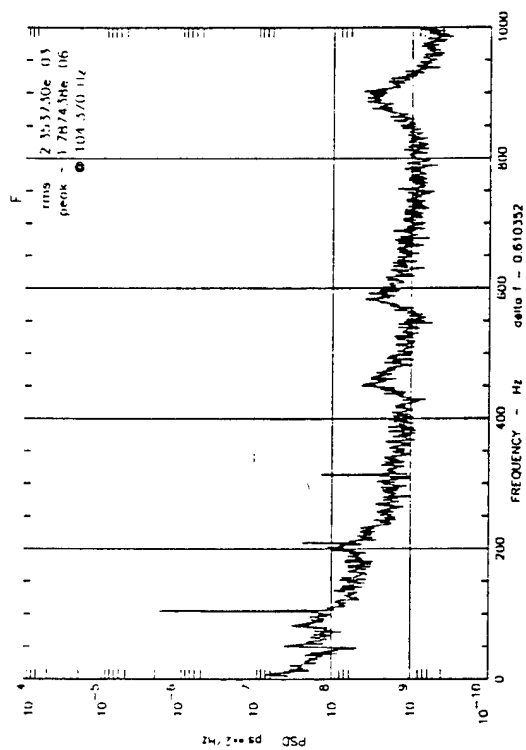
F 15 ITPN 3333: alpha=8 beta=0 bp=45



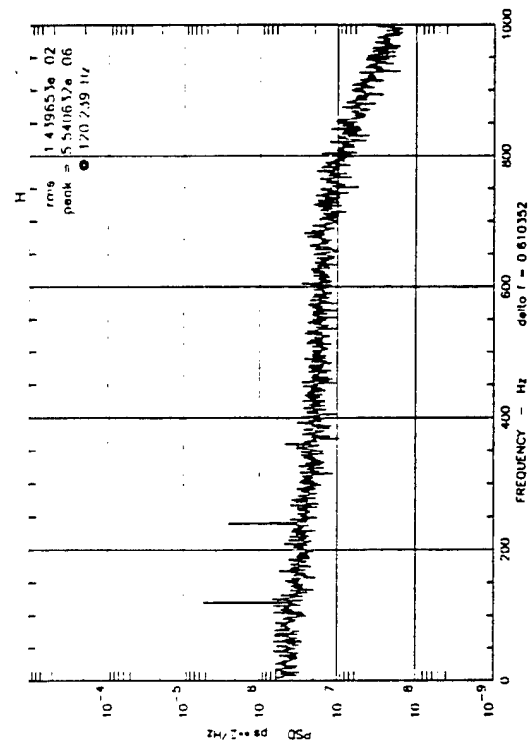
F 15 ITPN 3333: alpha=8 beta=0 bp=45



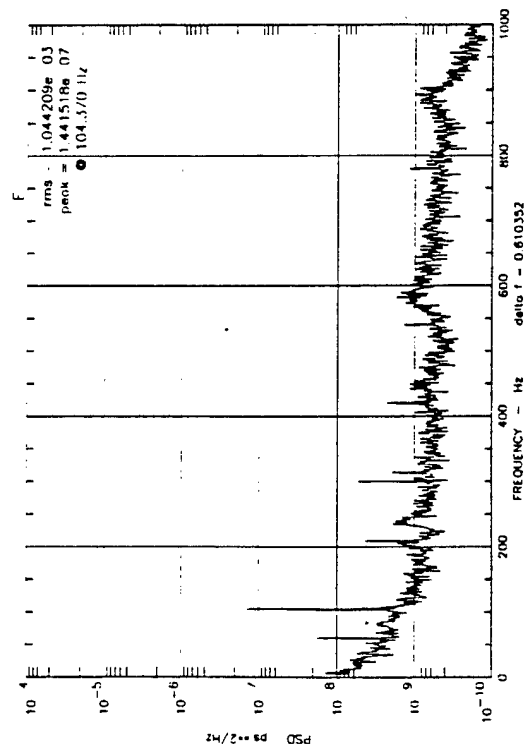
F 15 IPN 3333; alpha=8 beta=0 bp=45



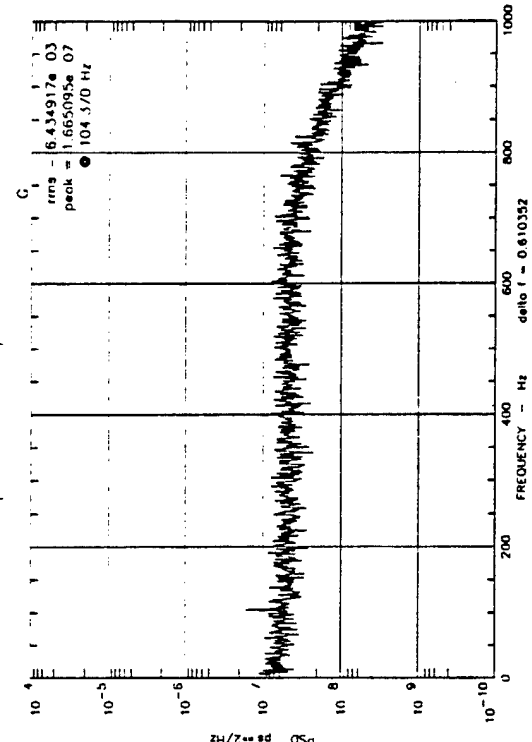
F 15 IPN 3333; alpha=8 beta=0 bp=45

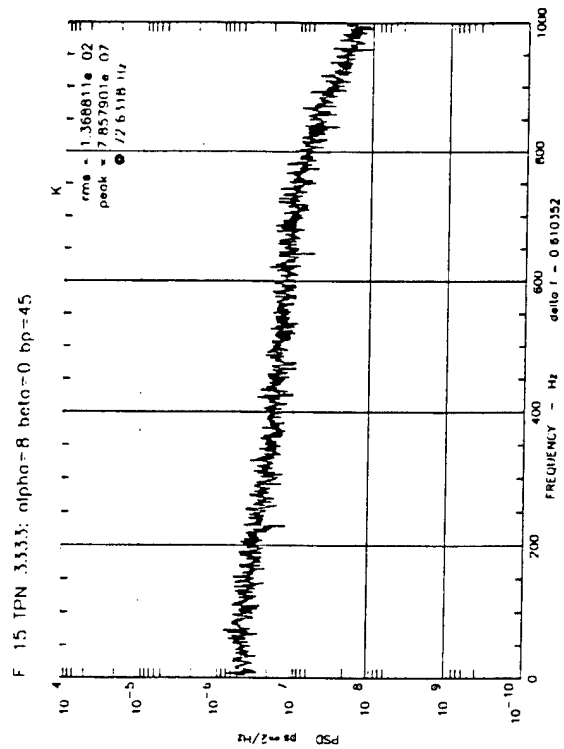
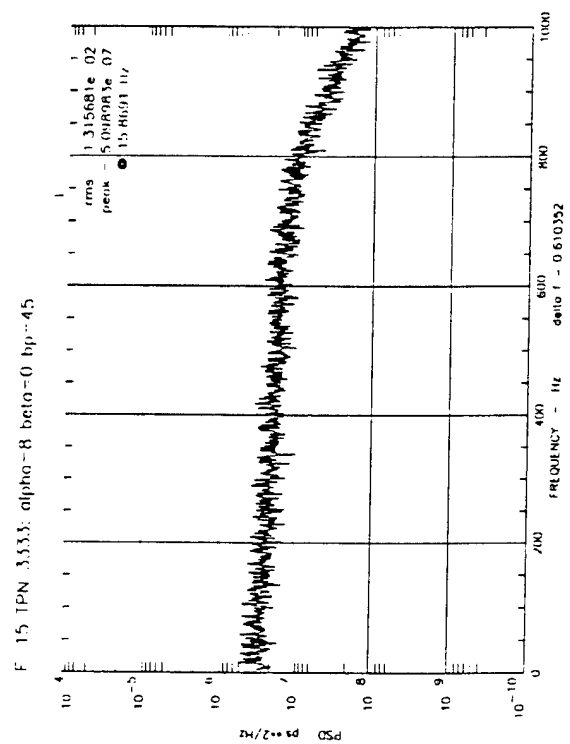
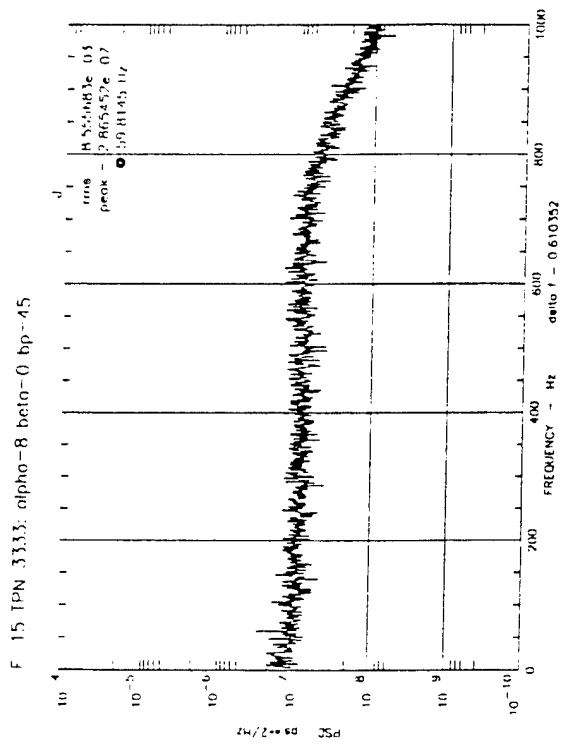


F 15 IPN 3333; alpha=8 beta=0 bp=45

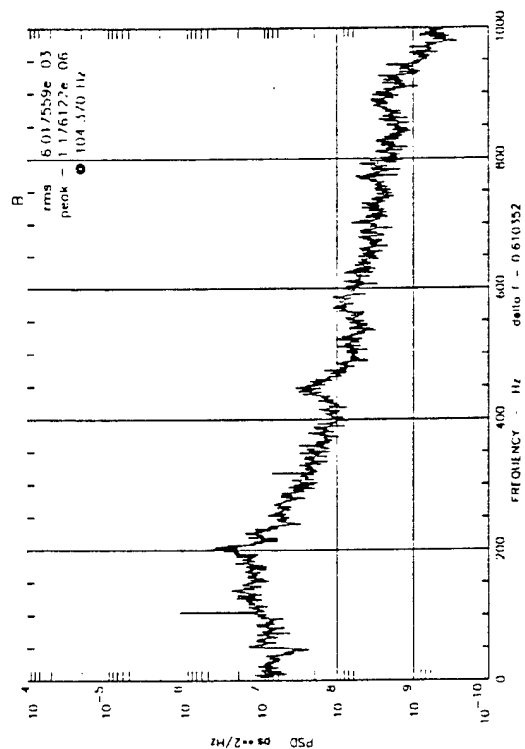


F 15 IPN 3333; alpha=8 beta=0 bp=45

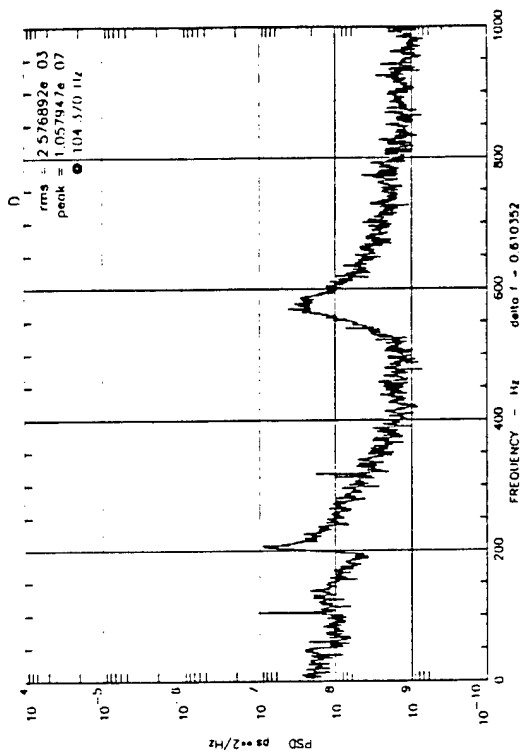




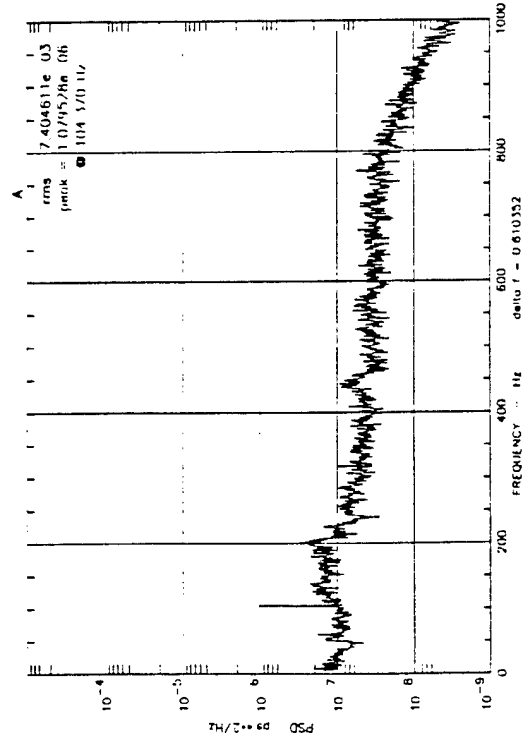
F 15 TPN 3337: alpha=16 beta=0 bp=45



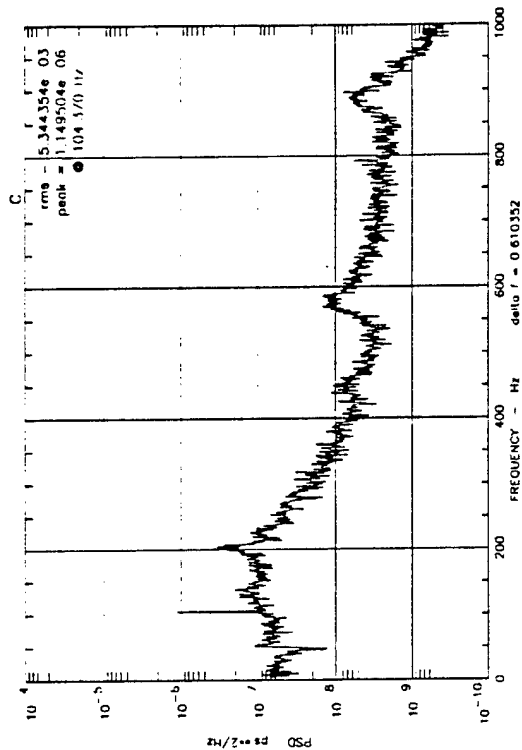
F 15 TPN 3337: alpha=16 beta=0 bp=45



F 15 TPN 3337: alpha=16 beta=0 bp=45

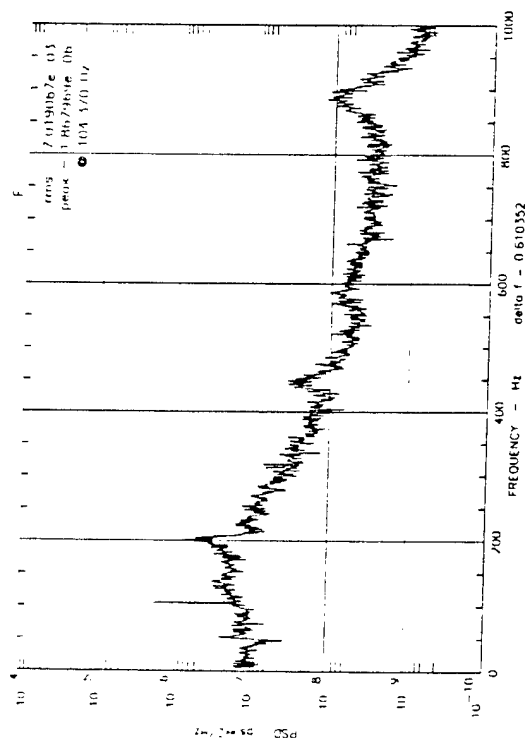


F 15 TPN 3337: alpha=16 beta=0 bp=45

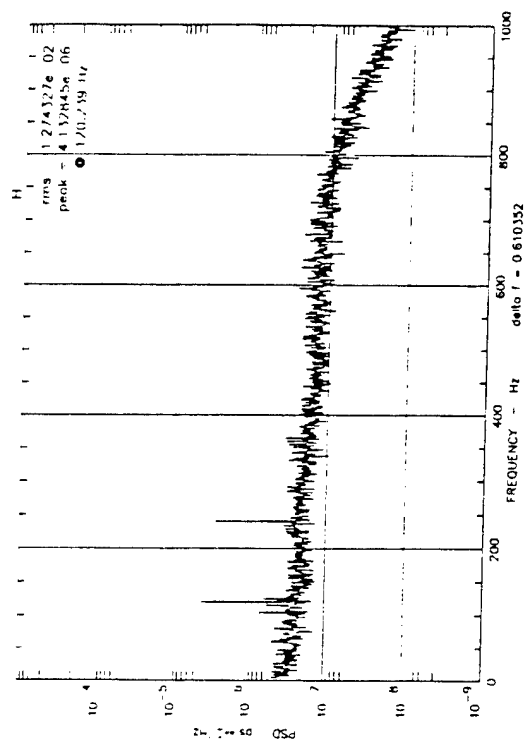




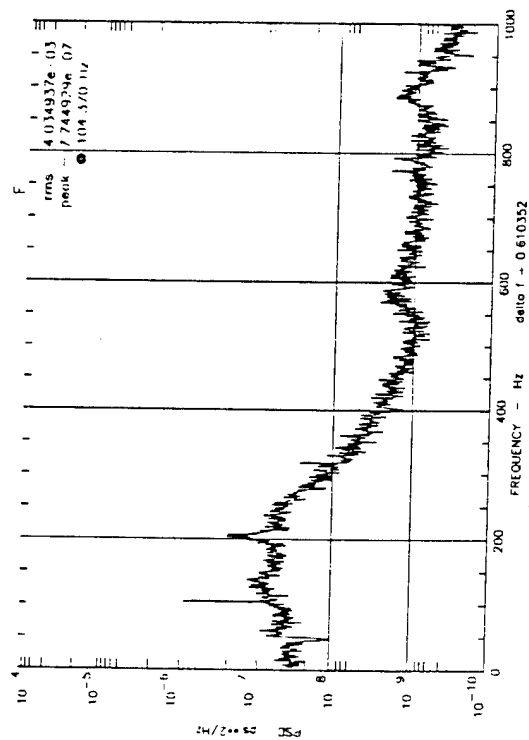
F 15 IPN 3337: alpha-16 beta-0 bp-45



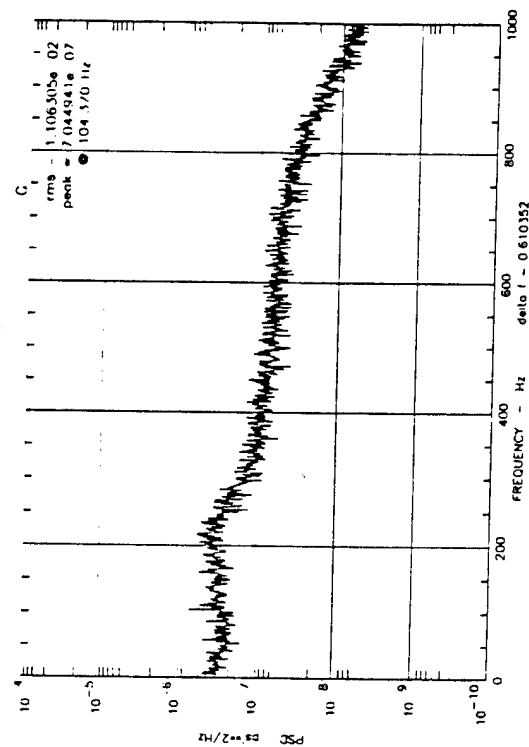
F 15 IPN 3337: alpha-16 beta-0 bp-45

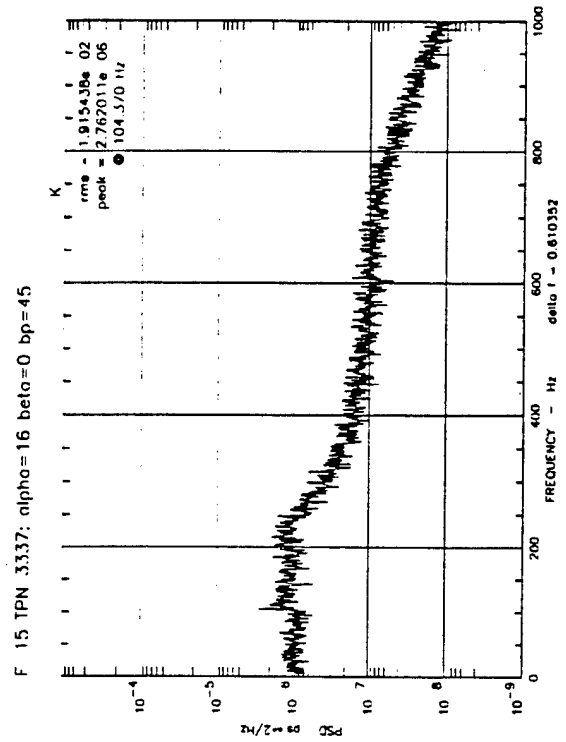
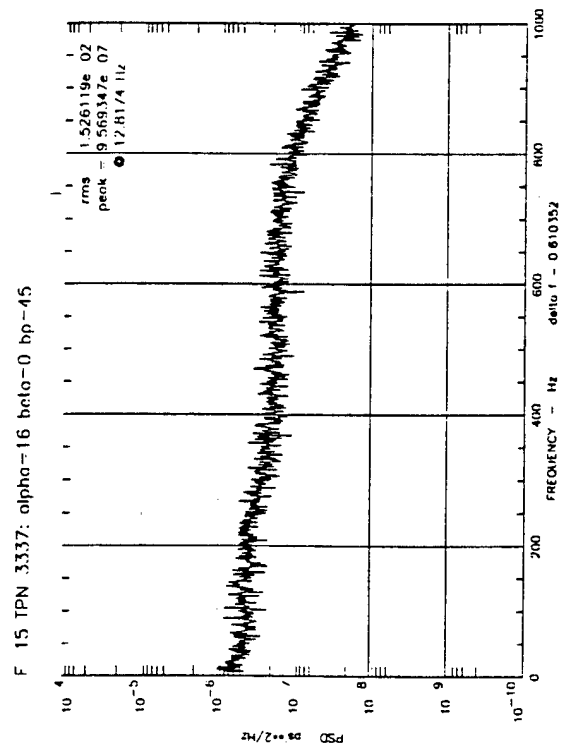
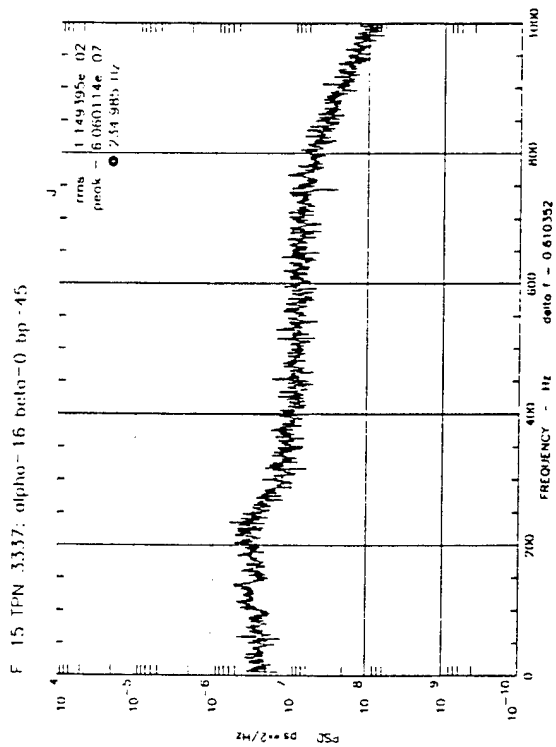


F 15 IPN 3337: alpha 16 beta 0 bp 45

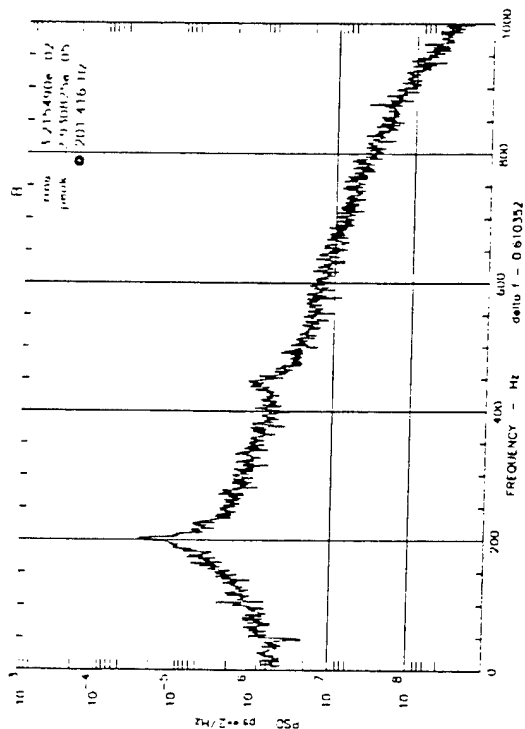


F 15 IPN 3337: alpha-16 beta-0 bp-45

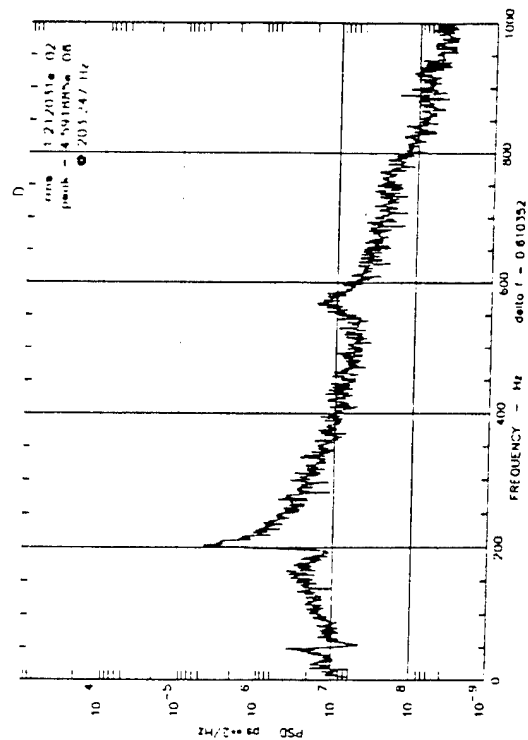




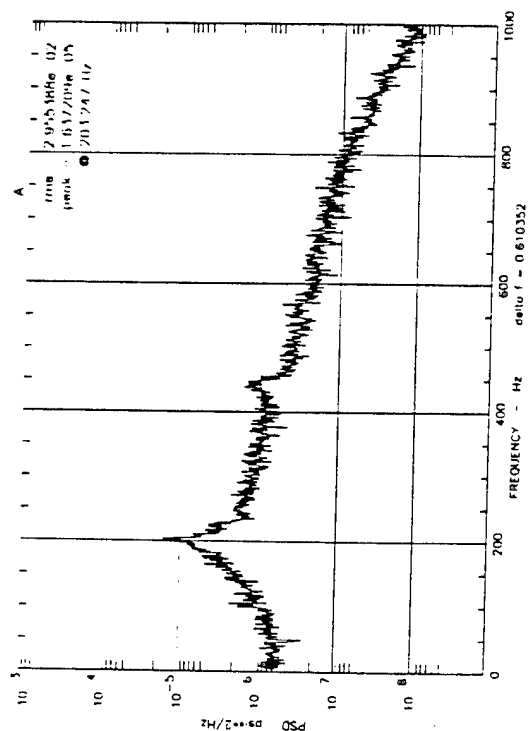
F 15 IPN 5539; alpha=20 beta=0 bp=45



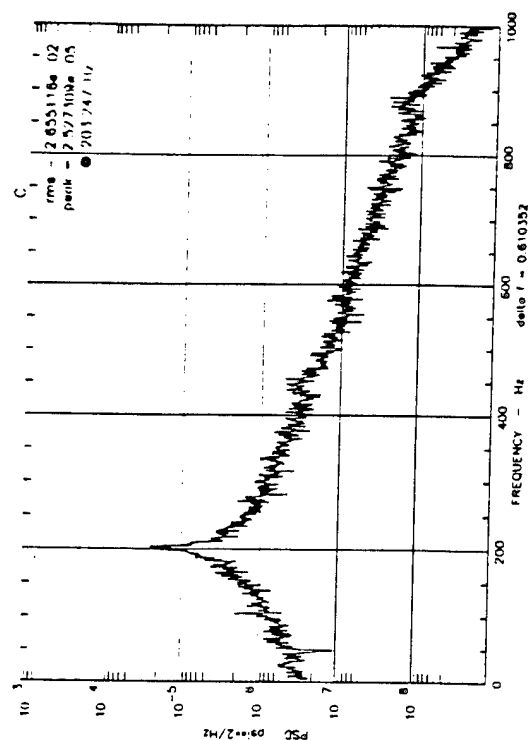
F 15 IPN 5539; alpha=20 beta=0 bp=45



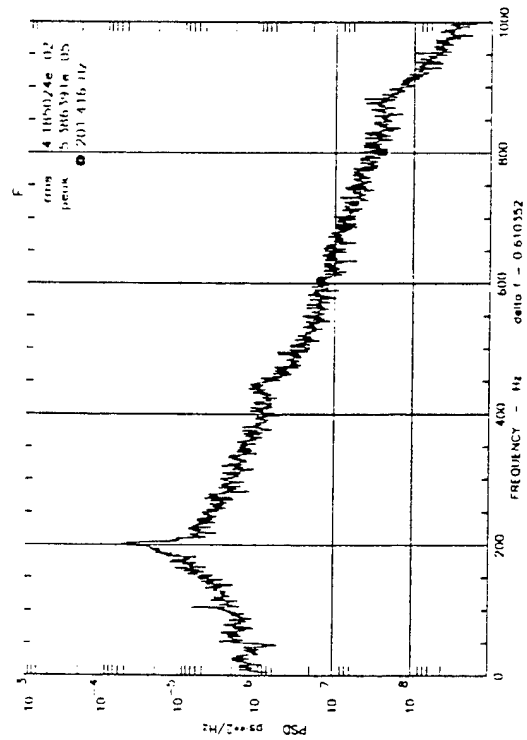
F 15 IPN 3339; alpha=20 beta=0 bp=45



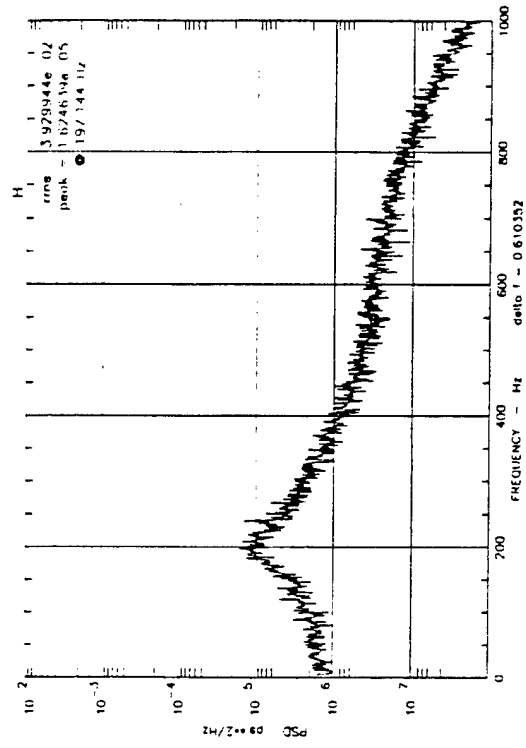
F 15 IPN 3339; alpha=20 beta=0 bp=45



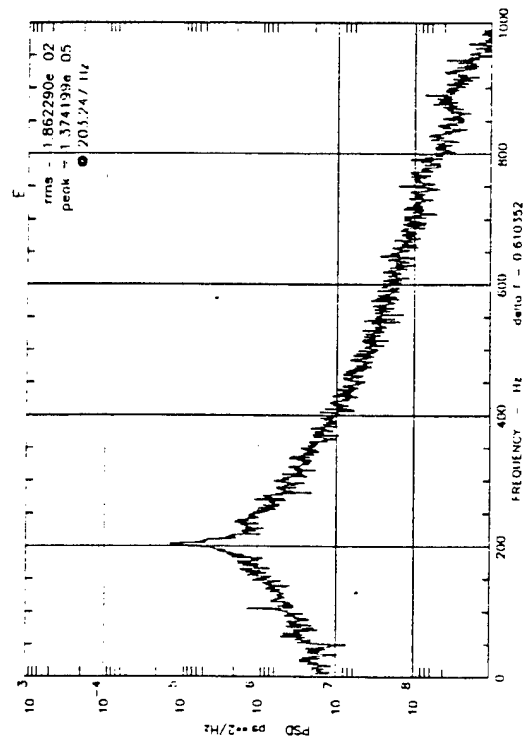
F 15 TPN 3339: alpha=20 beta=0 bp=45



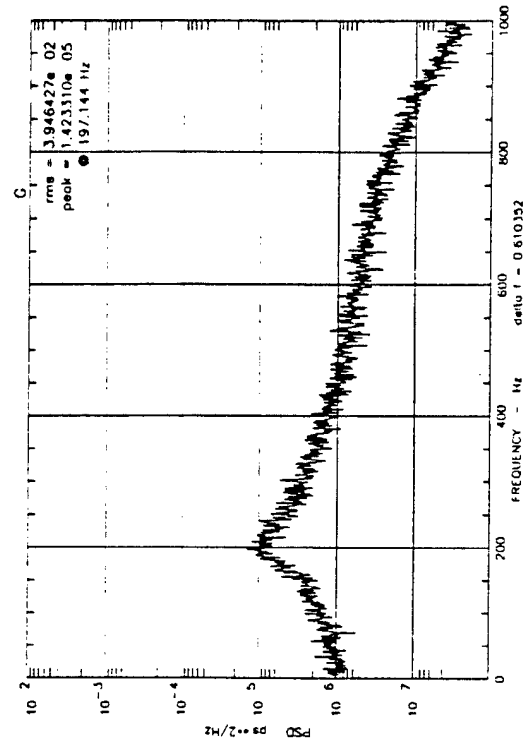
F 15 TPN 3339: alpha=20 beta=0 bp=45



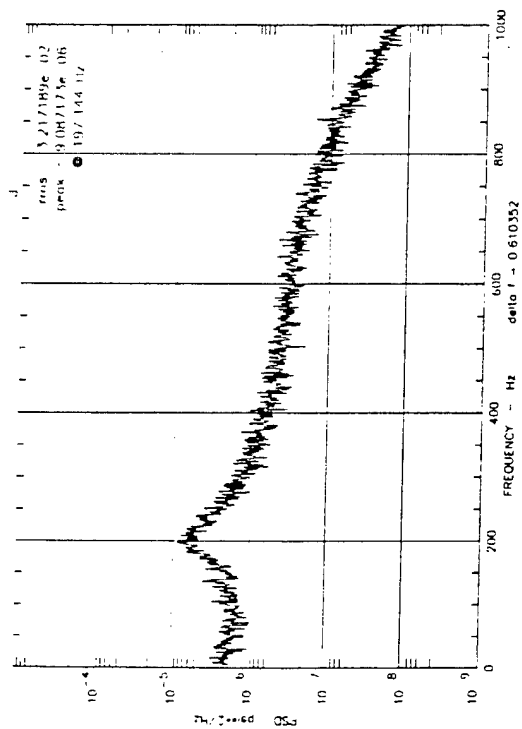
F 15 TPN 3339: alpha=20 beta=0 bp=45



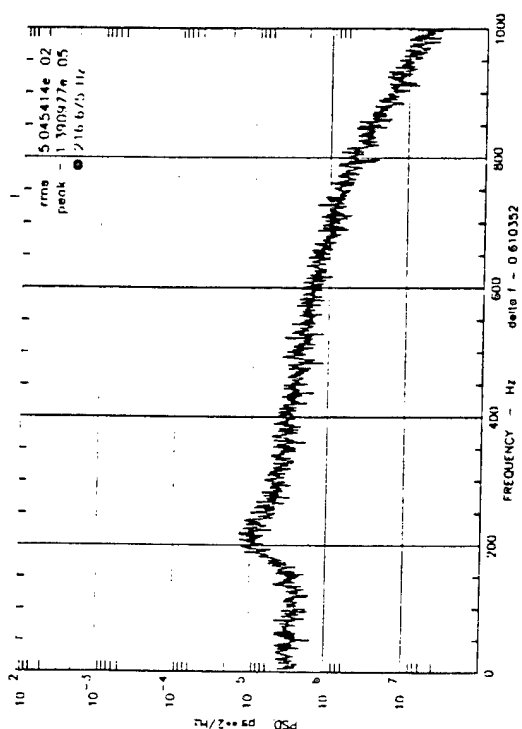
F 15 TPN 3339: alpha=20 beta=0 bp=45



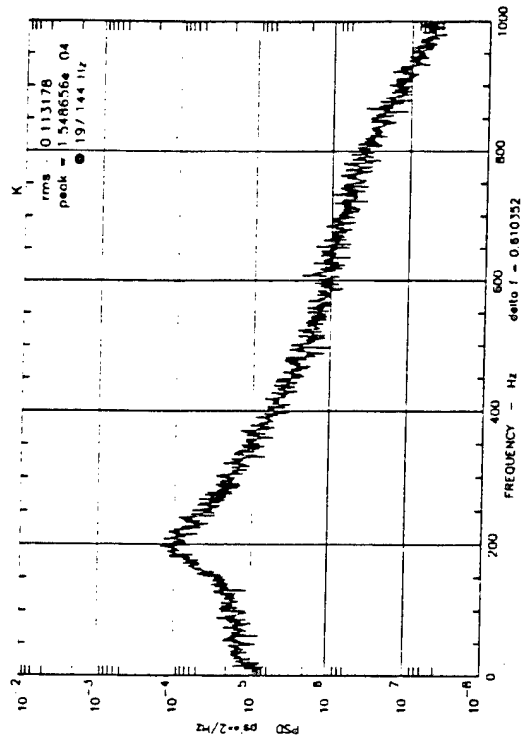
F 15 TPN 3339: alpha=20 beta=0 bp=45



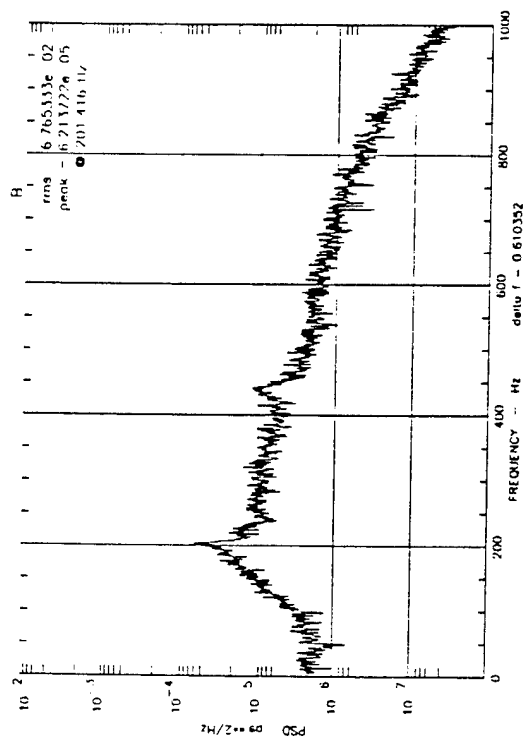
F 15 TPN 3339: alpha=20 beta=0 bp=45



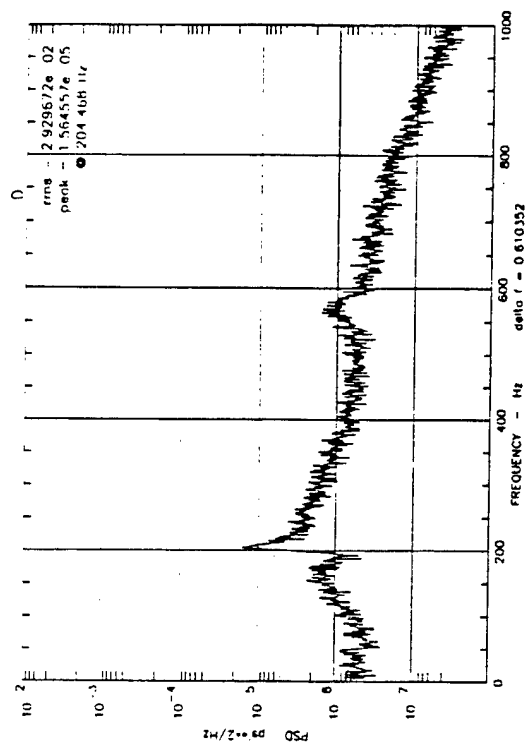
F 15 TPN 3339: alpha=20 beta=0 bp=45



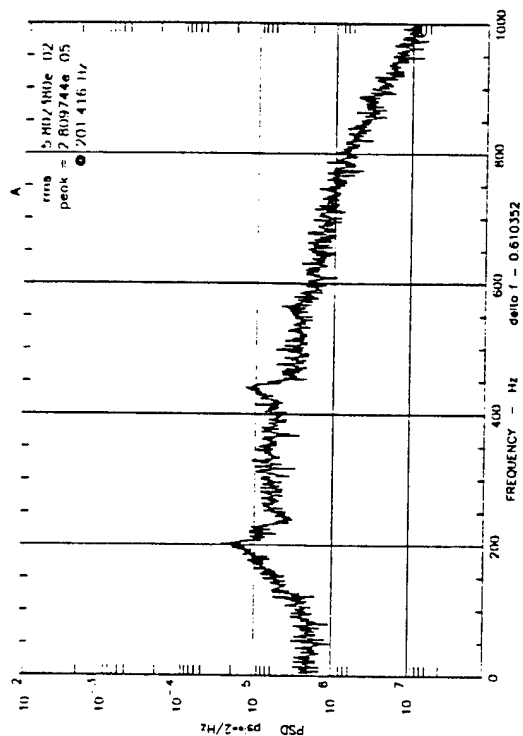
F 15 IPN 3341: alpha=24 beta=0 bp=45



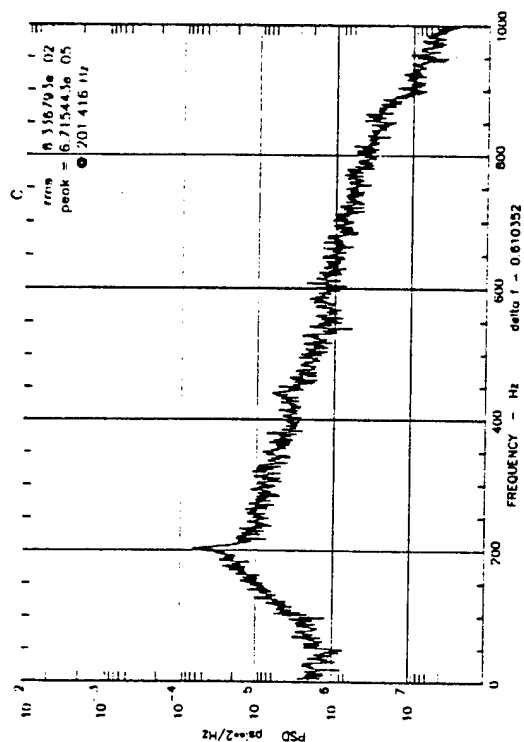
F 15 IPN 3341: alpha=24 beta=0 bp=45



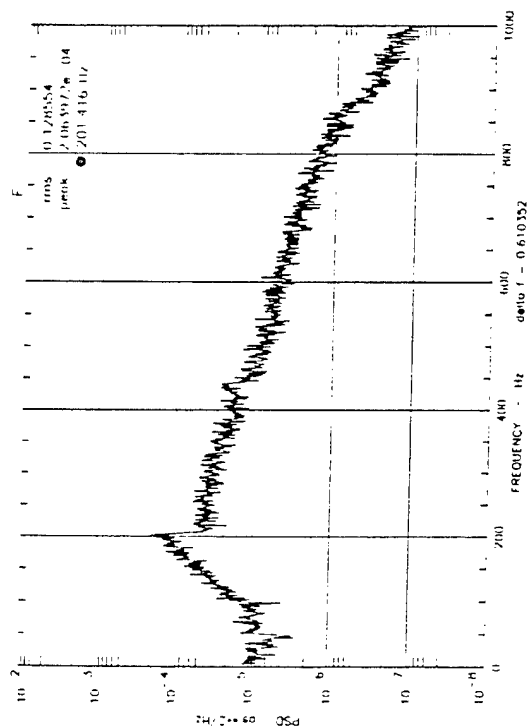
F 15 IPN 3341: alpha=24 beta=0 bp=45



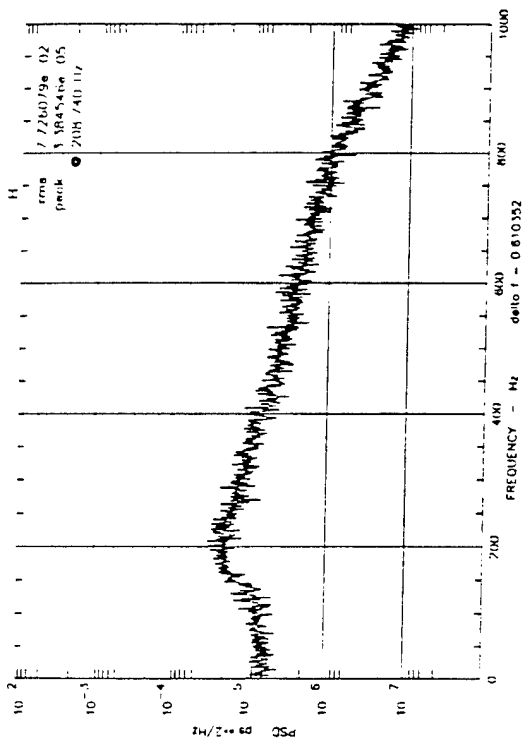
F 15 IPN 3341: alpha=24 beta=0 bp=45



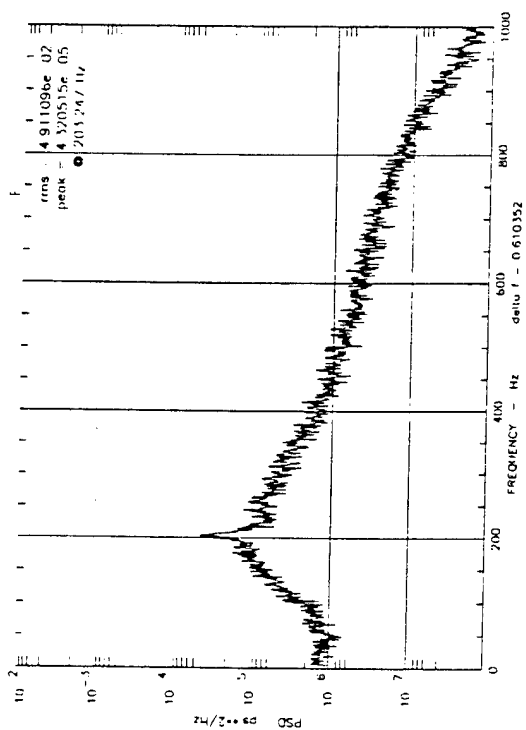
F 15 TPN 3341; alpha=24 beta=0 bp=45



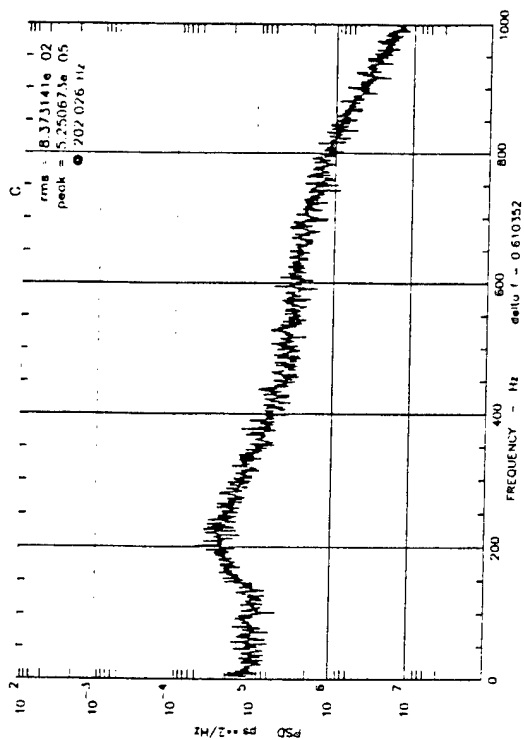
F 15 TPN 3341; alpha=24 beta=0 bp=45

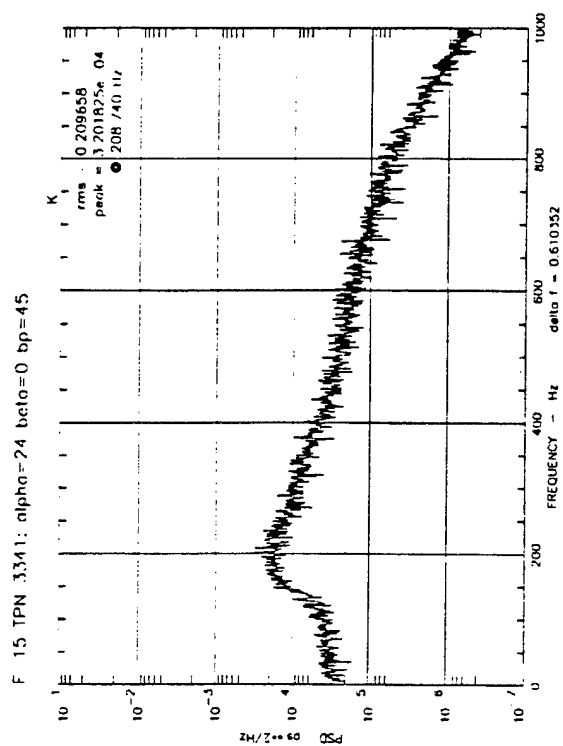
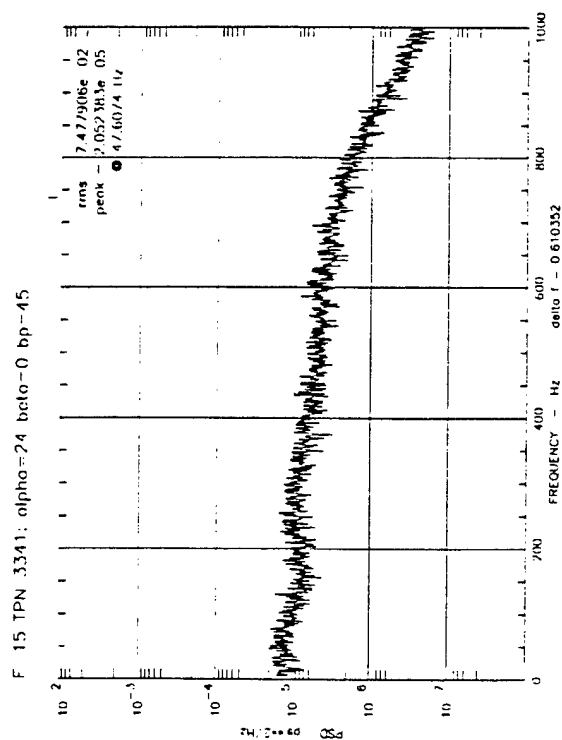
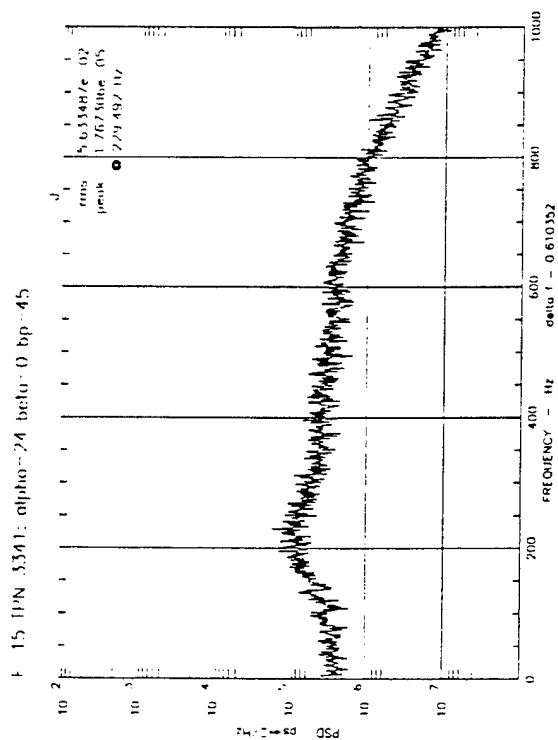


F 15 TPN 3341; alpha=24 beta=0 bp=45



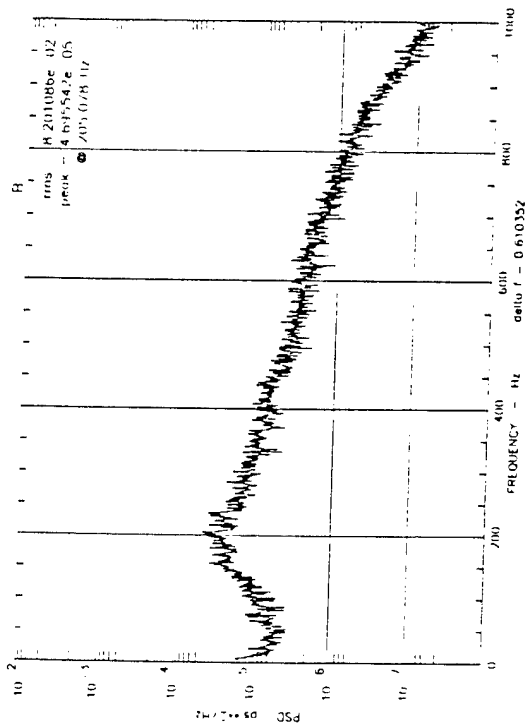
F 15 TPN 3341; alpha=24 beta=0 bp=45



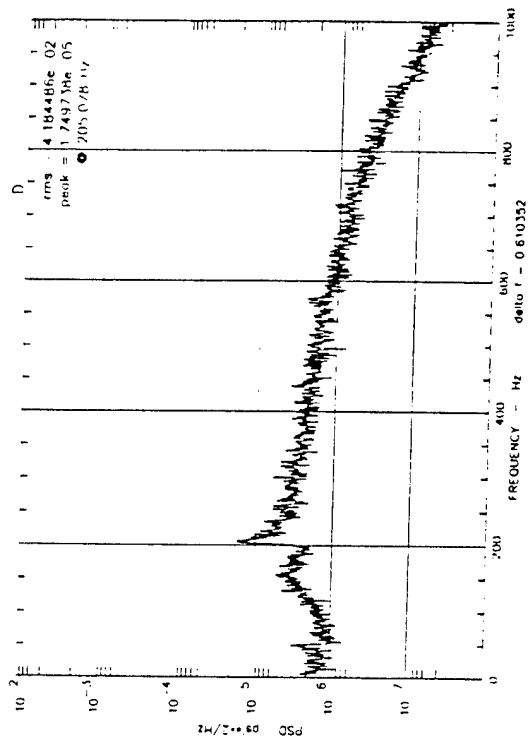




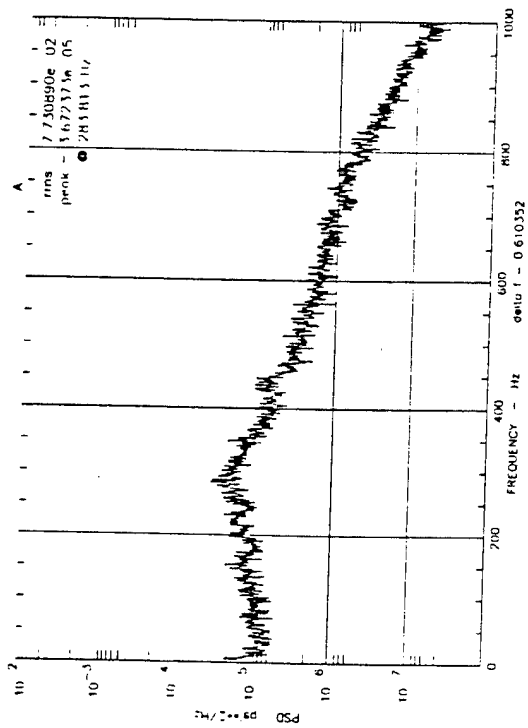
F 15 TPN 3342: alpha=28 beta=0 bp=45



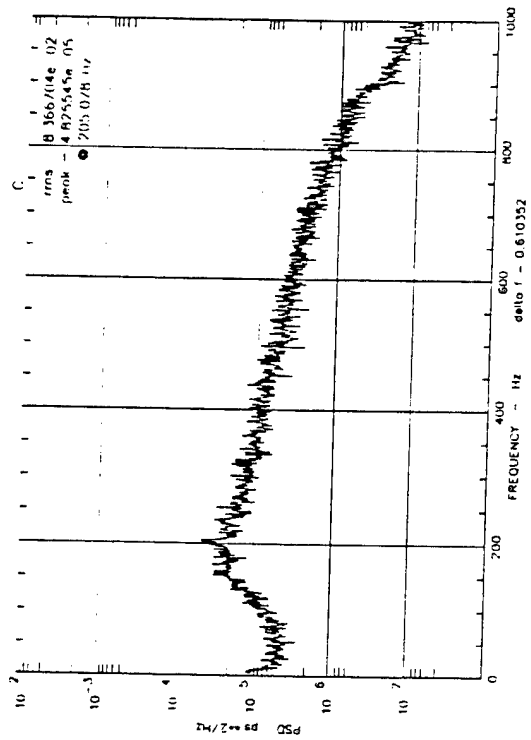
F 15 TPN 3342: alpha=28 beta=0 bp=45



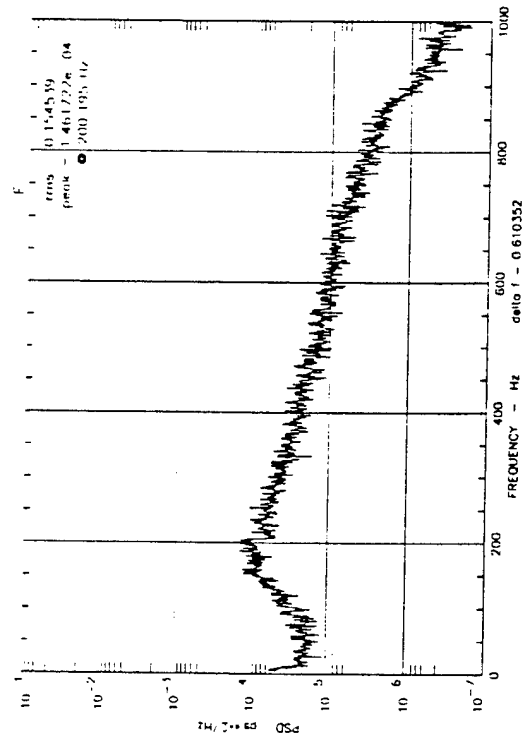
F 15 TPN 3342: alpha=28 beta=0 bp=45



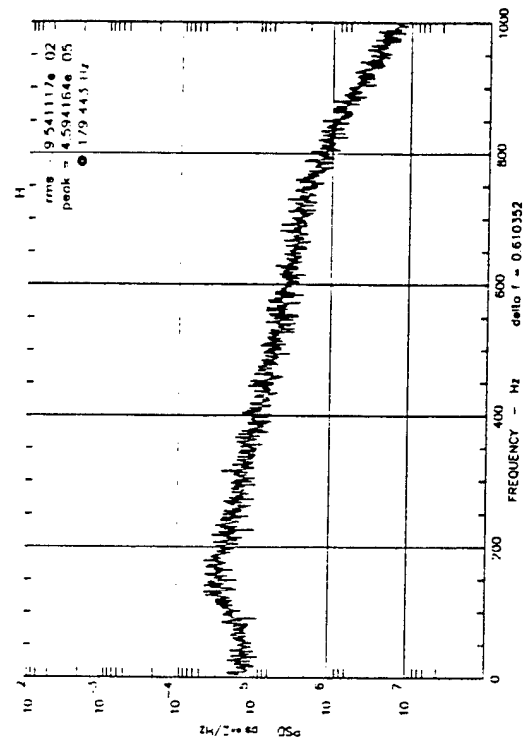
F 15 TPN 3342: alpha=28 beta=0 bp=45



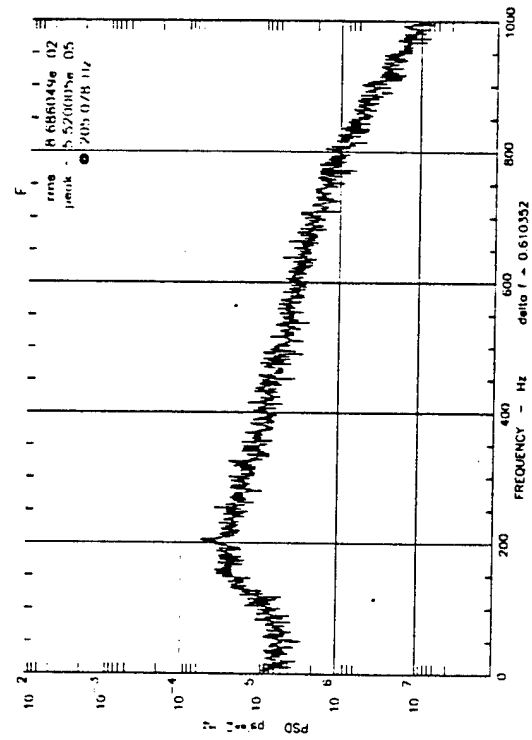
F 15 TPN 3342: alpha=28 beta=0 bp=45



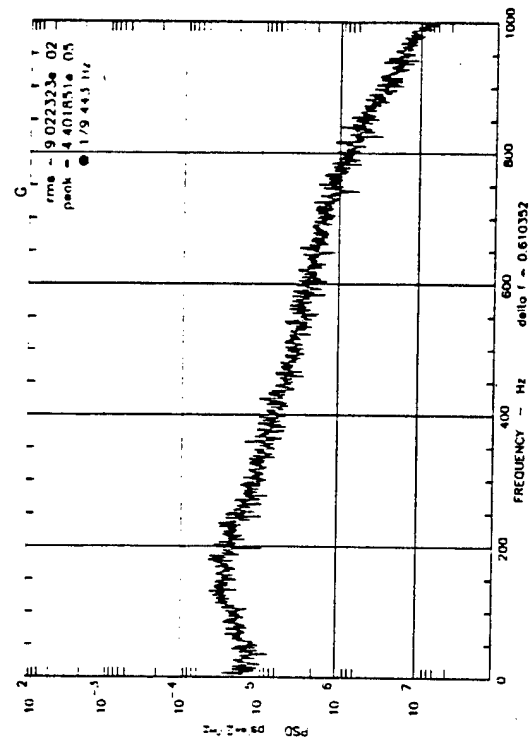
F 15 TPN 3342: alpha=28 beta=0 bp=45



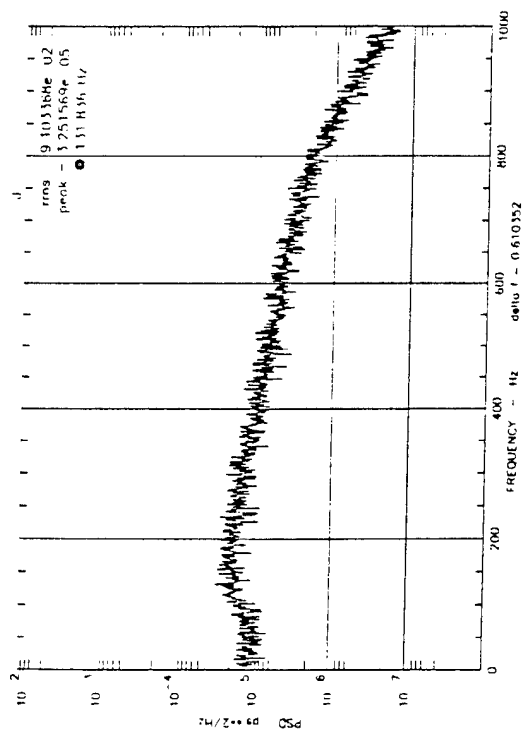
F 15 TPN 3342: alpha=28 beta=0 bp=45



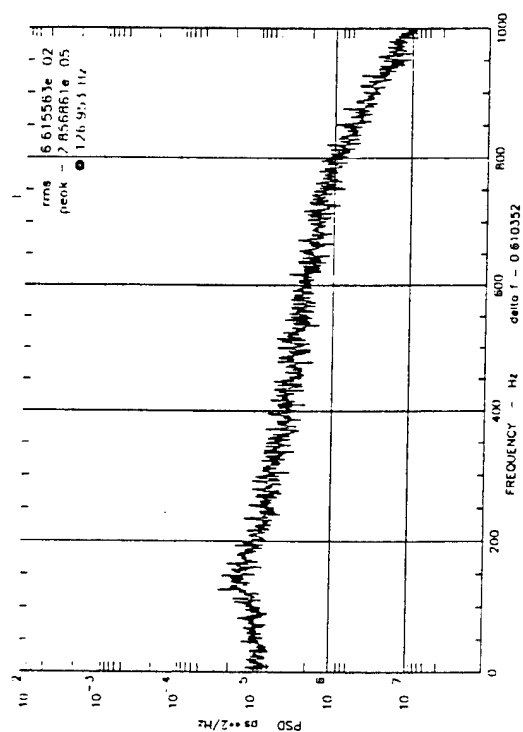
F 15 TPN 3342: alpha=28 beta=0 bp=45



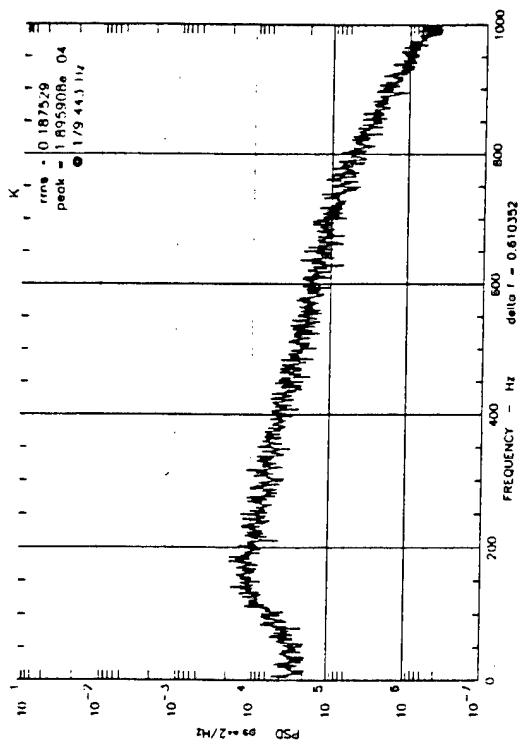
F 15 TPN 3342: alpha=28 beta=0 bp=45



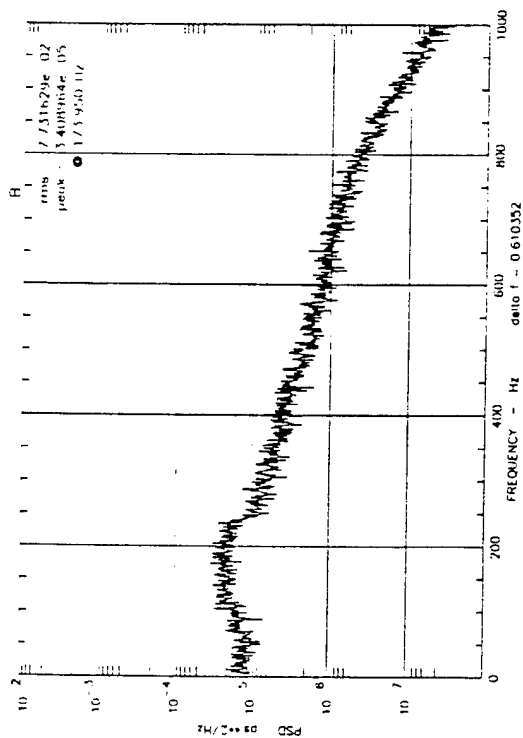
F 15 TPN 3342: alpha=28 beta=0 bp=45



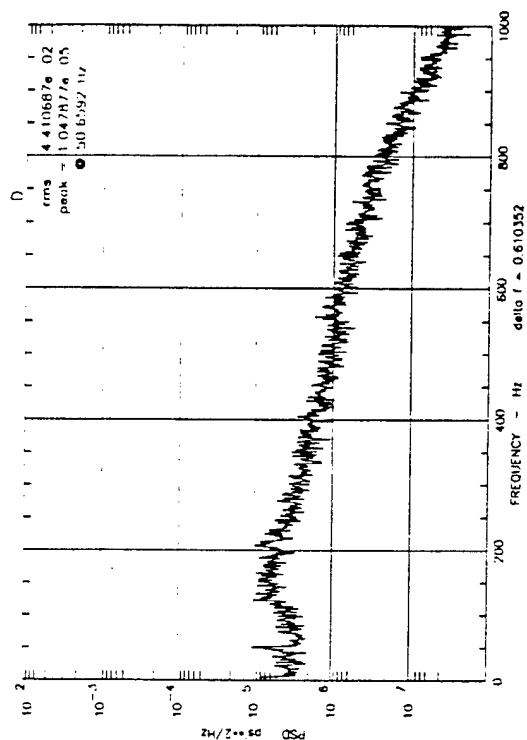
F 15 TPN 3342: alpha=28 beta=0 bp=45



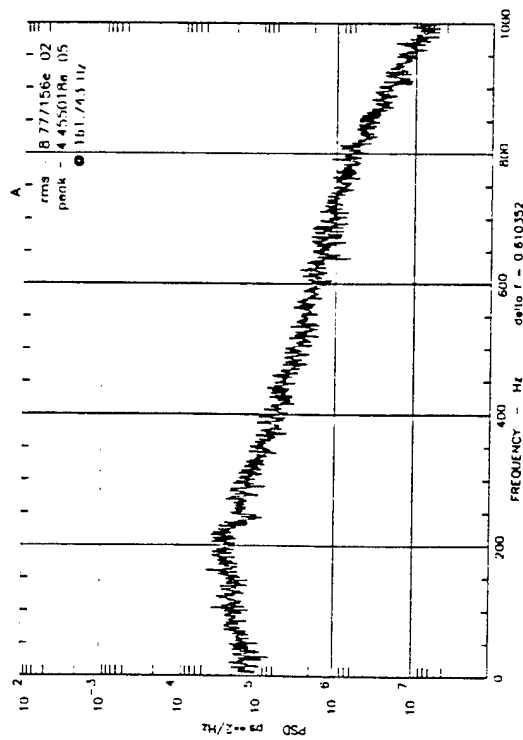
F 15 TPN 3343: alpha=32 beta=0 bp=45



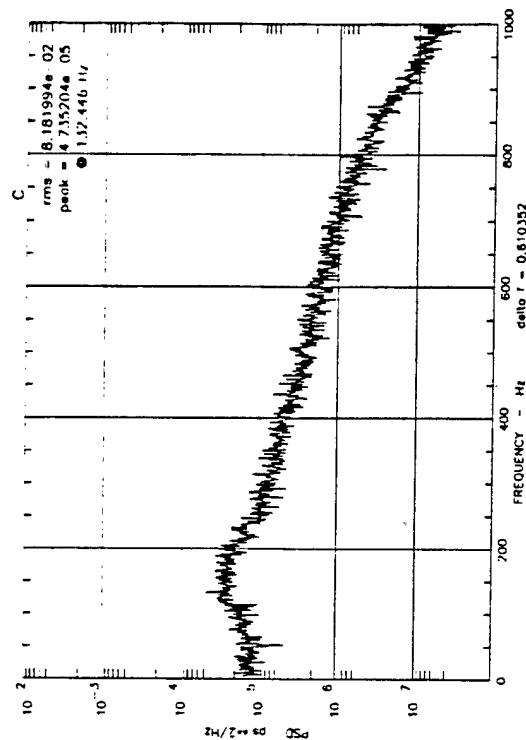
F 15 TPN 3343: alpha=32 beta=0 bp=45



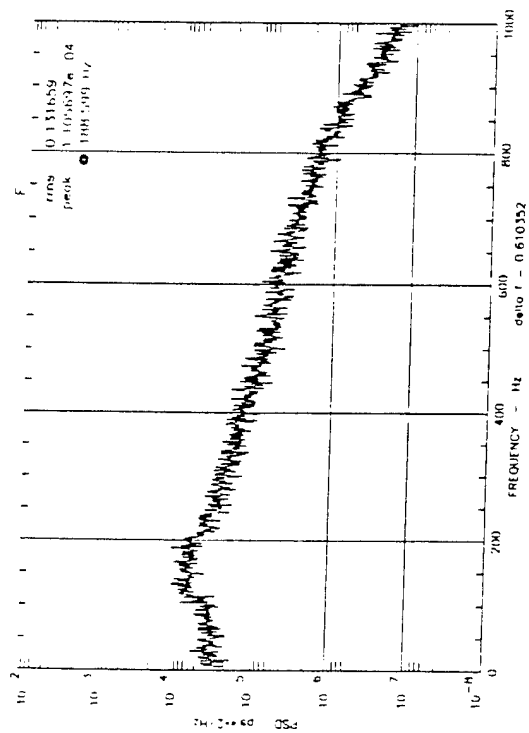
F 15 TPN 3343: alpha=32 beta=0 bp=45



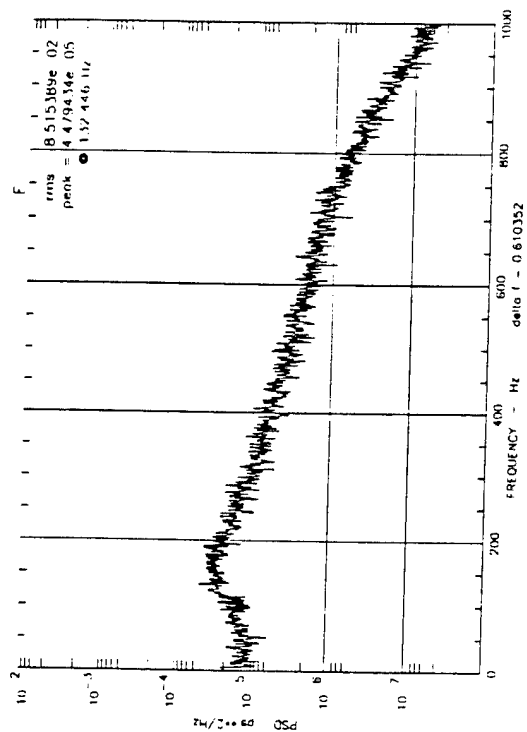
F 15 TPN 3343: alpha=32 beta=0 bp=45



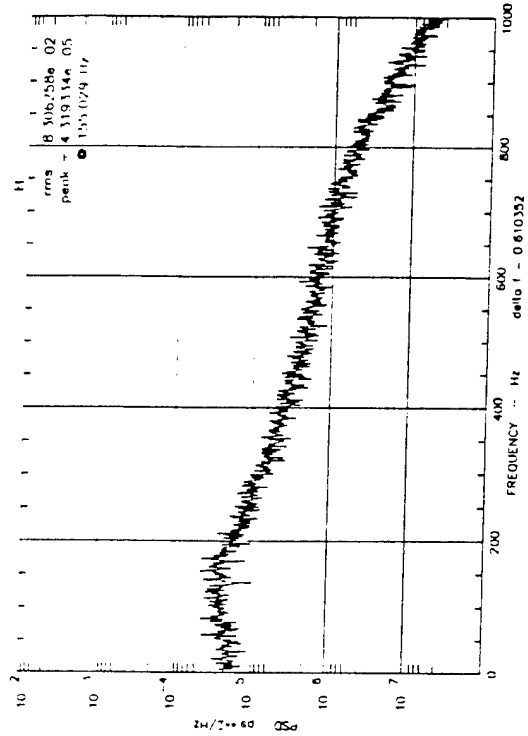
F 15 TPN 3343; alpha=32 beta=0 bp=45



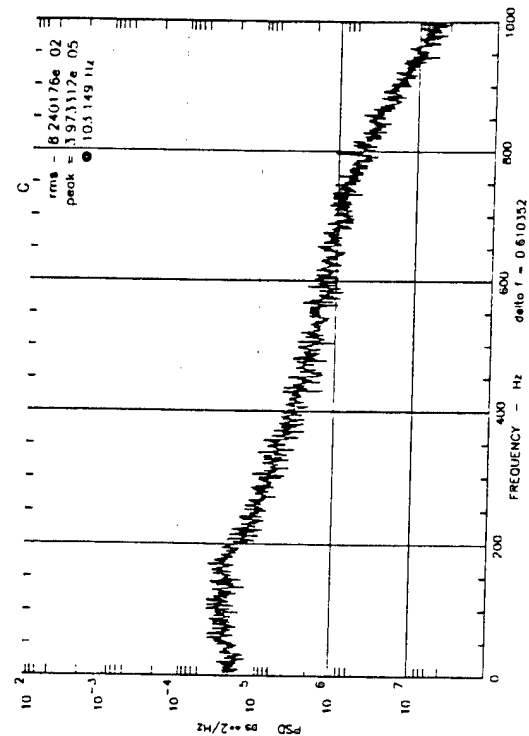
F 15 TPN 3343; alpha=32 beta=0 bp=45

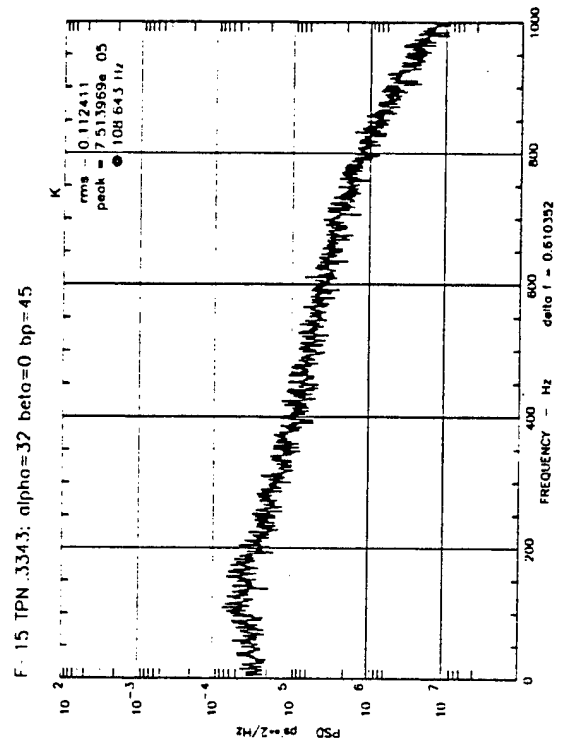
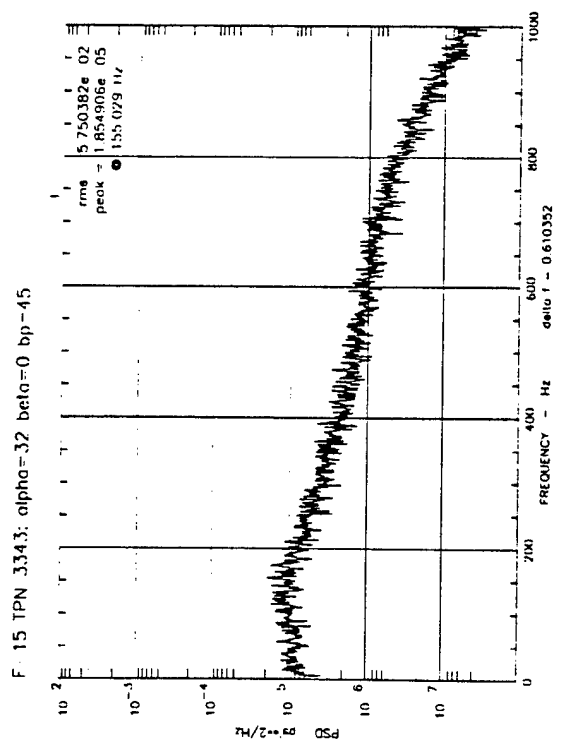
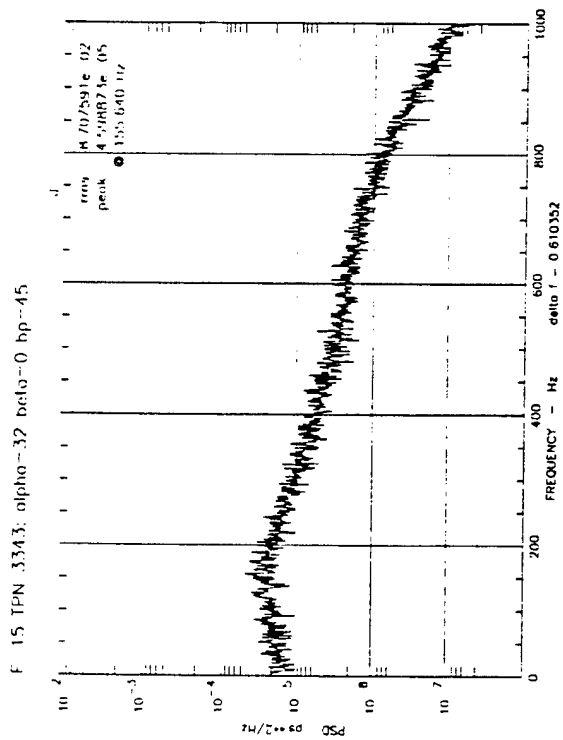


F 15 TPN 3343; alpha=32 beta=0 bp=45

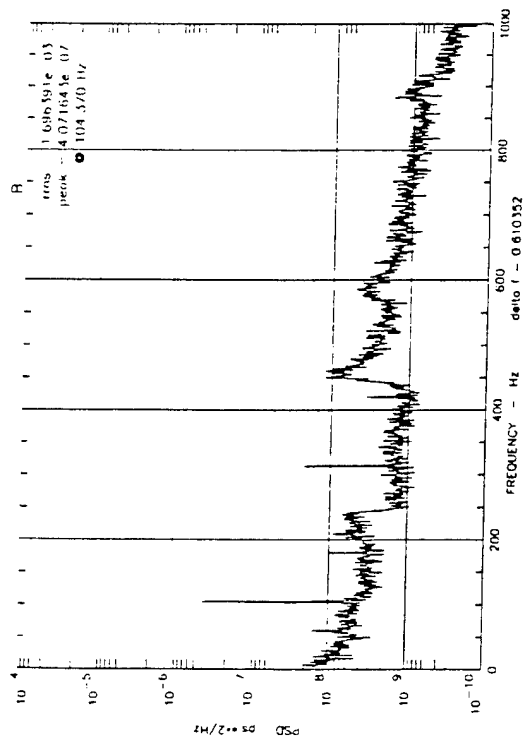


F 15 TPN 3343; alpha=32 beta=0 bp=45

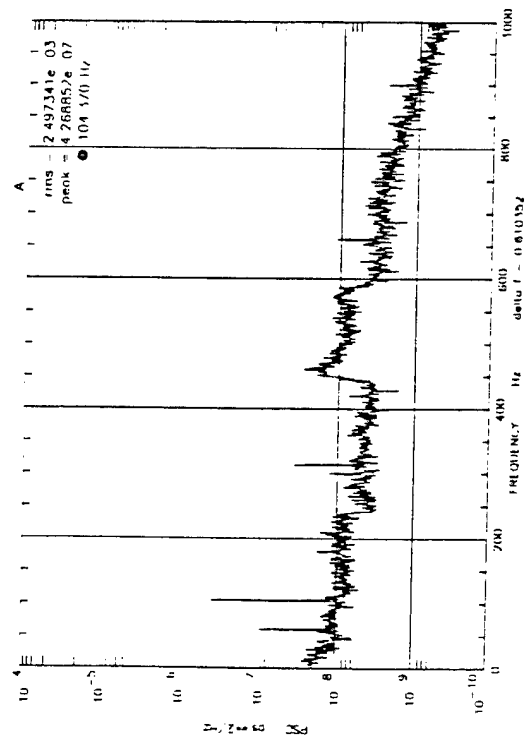




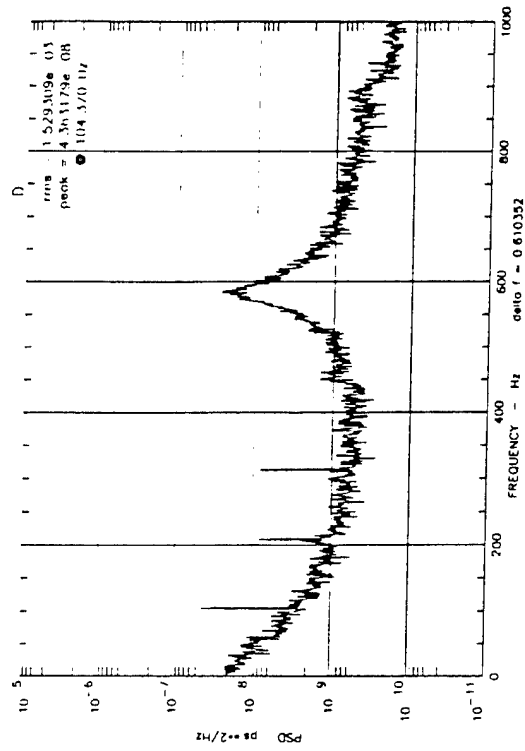
F 15 TPN 3369: alpha=8 beta= 4 bp=45



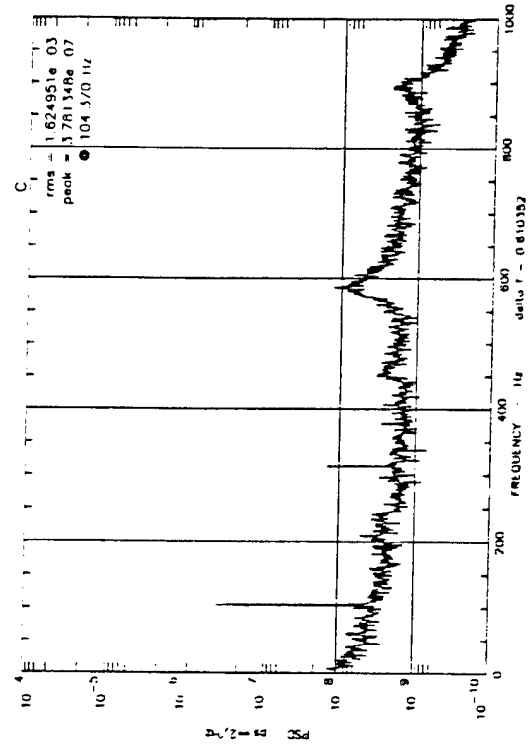
F 15 TPN 3369: alpha=8 beta= 4 bp=45



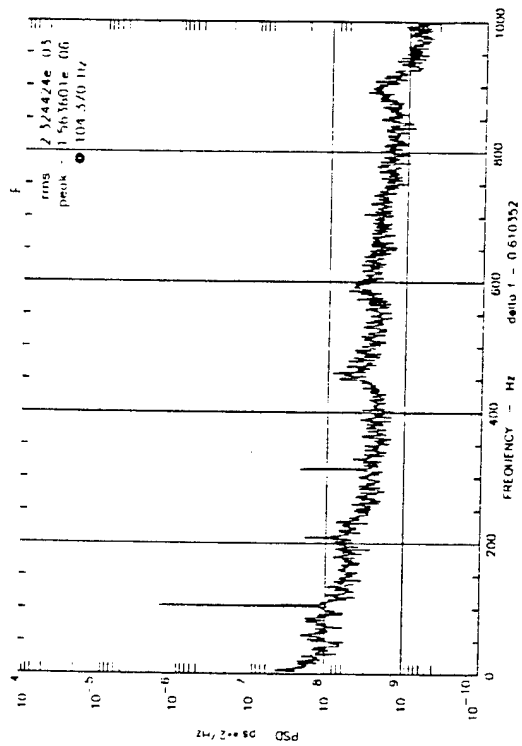
F 15 TPN 3369: alpha=8 beta= 4 bp=45



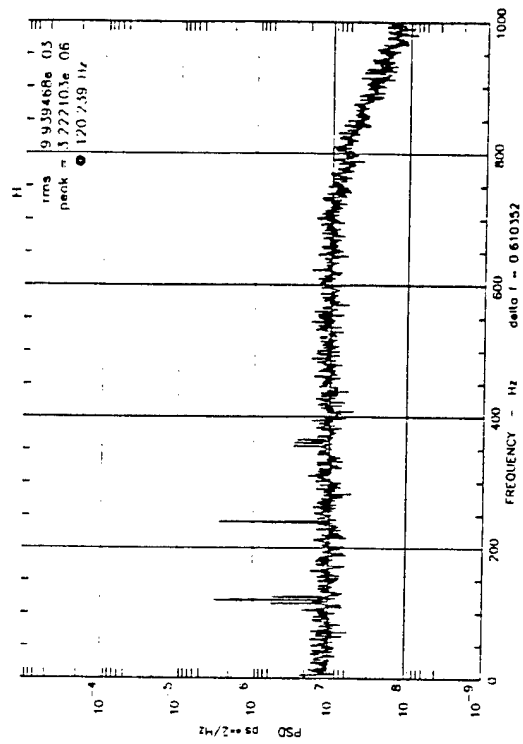
F 15 TPN 3369: alpha=8 beta= 4 bp=45



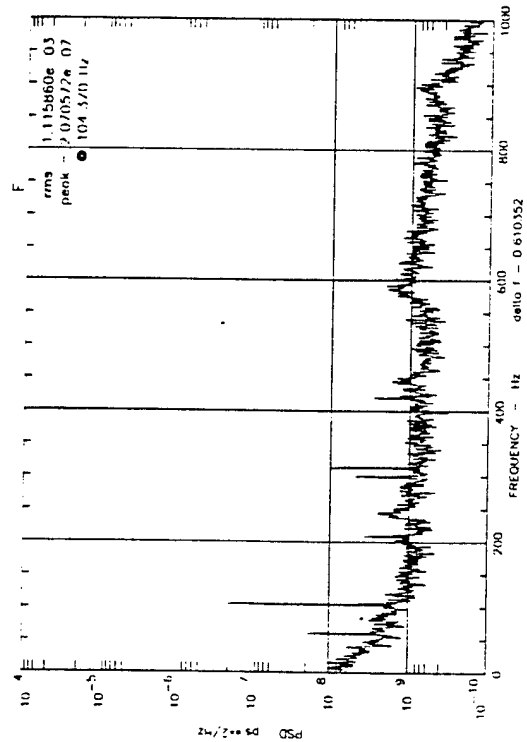
F 15 TPN 3369:  $\alpha=8$   $\beta=4$  bp=45



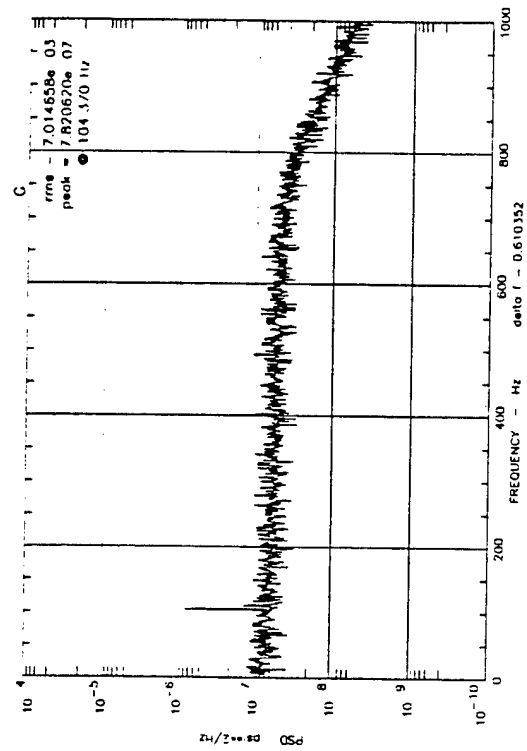
F 15 TPN 3369:  $\alpha=8$   $\beta=4$  bp=45



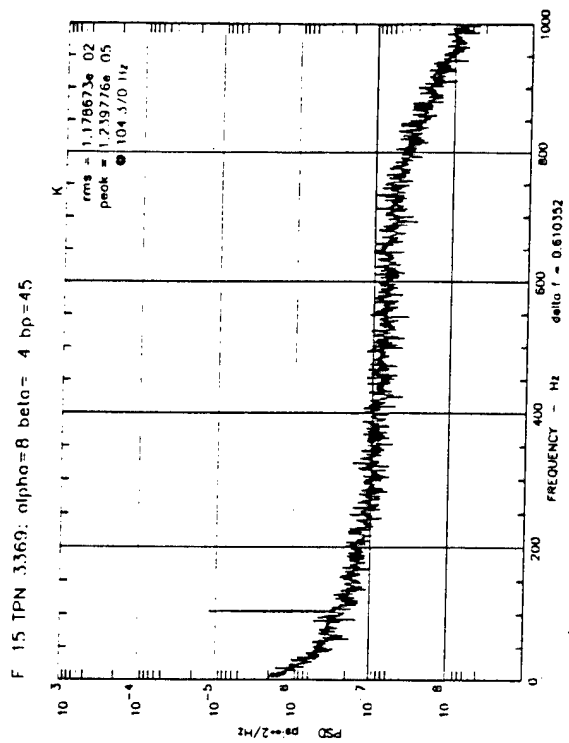
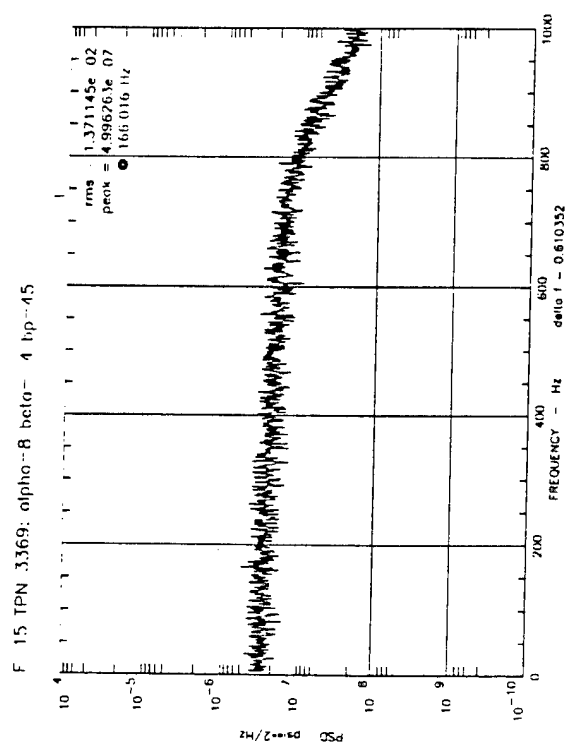
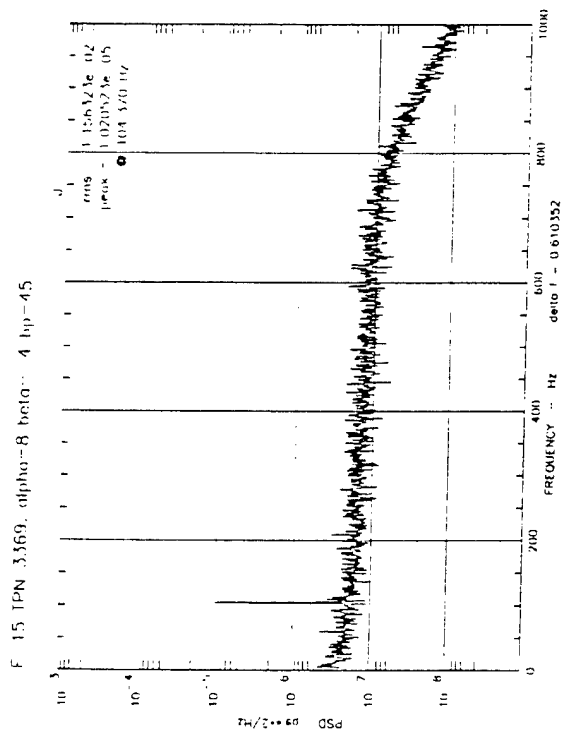
F 15 TPN 3369:  $\alpha=8$   $\beta=4$  bp=45



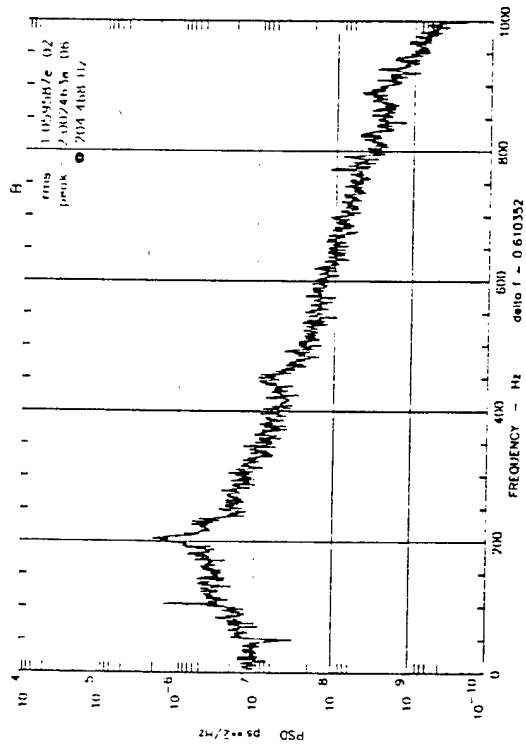
F 15 TPN 3369:  $\alpha=8$   $\beta=4$  bp=45



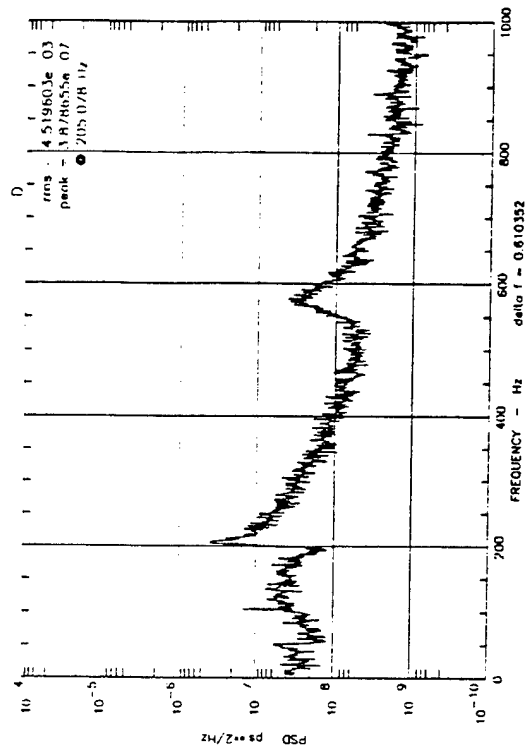




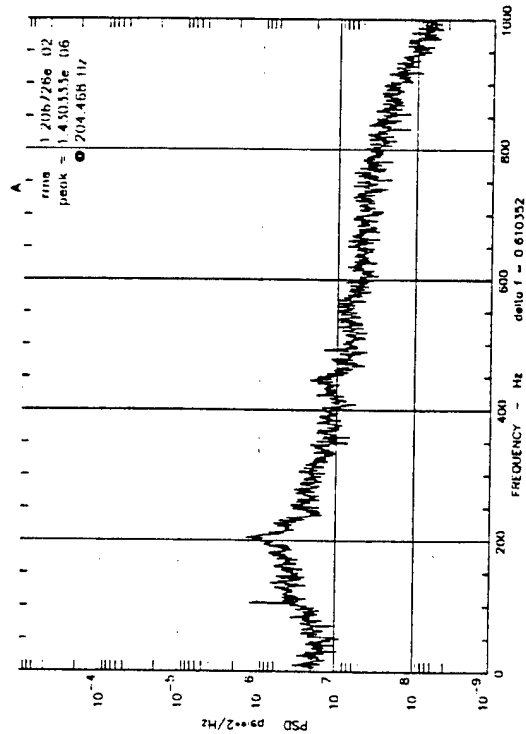
F 15 TPN 3373: alpha=16 beta= 4 bp=45



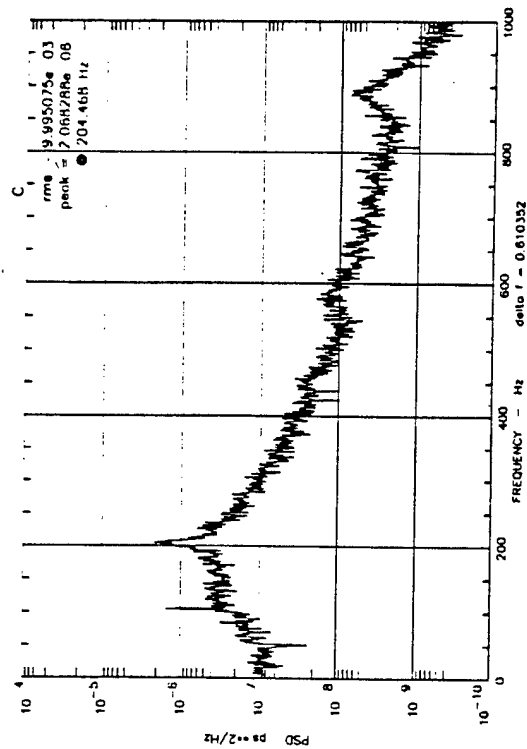
F 15 TPN 3373: alpha=16 beta= 4 bp=45

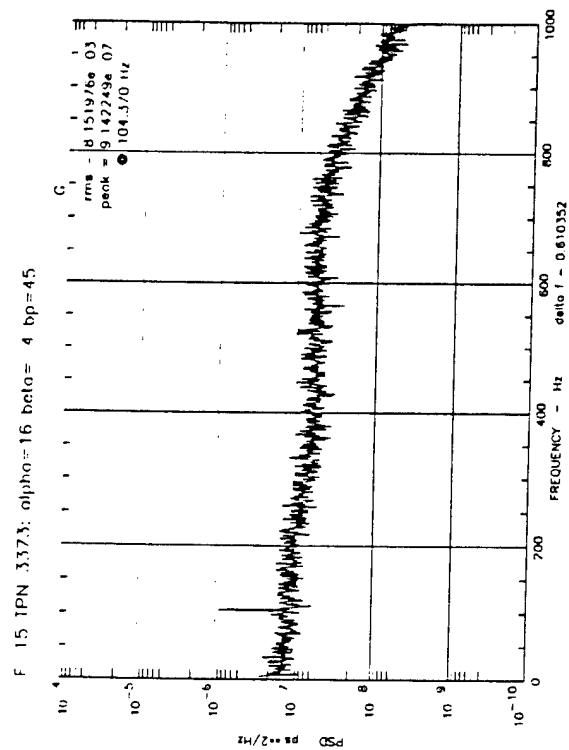
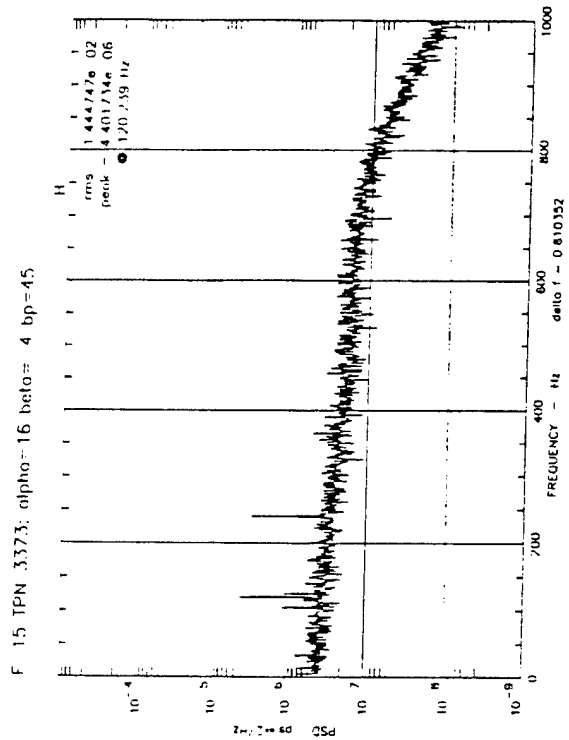
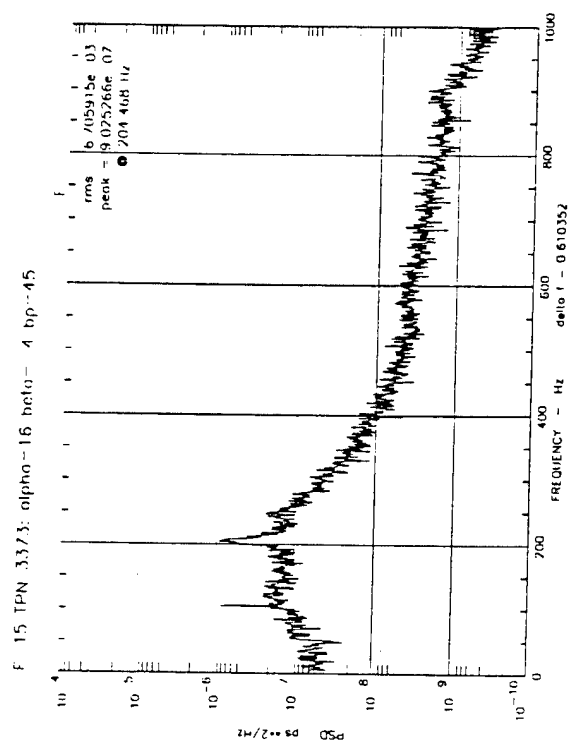
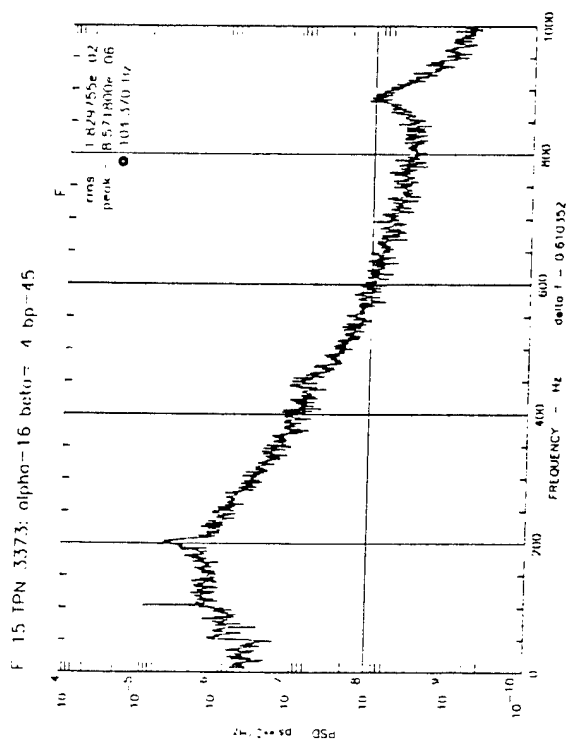


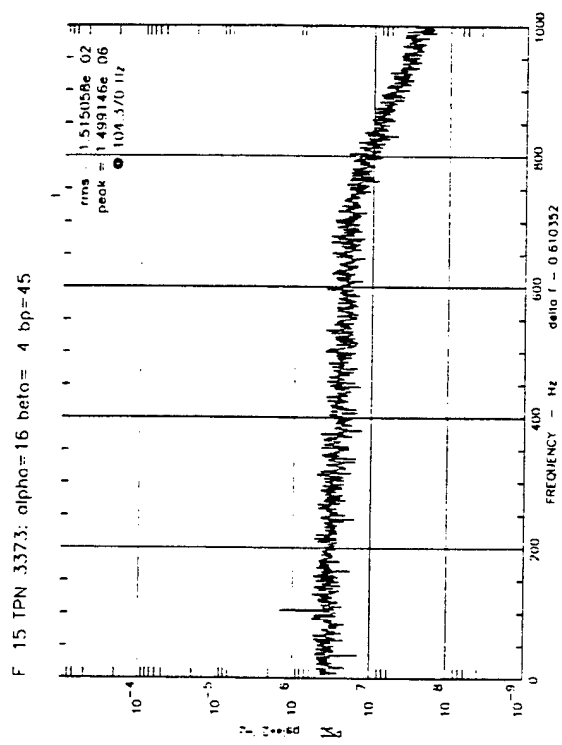
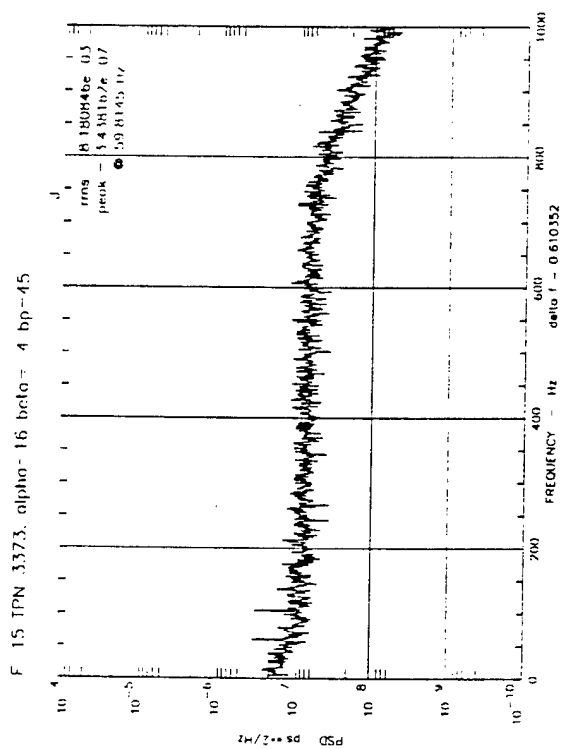
F 15 TPN 3373: alpha=16 beta= 4 bp=45



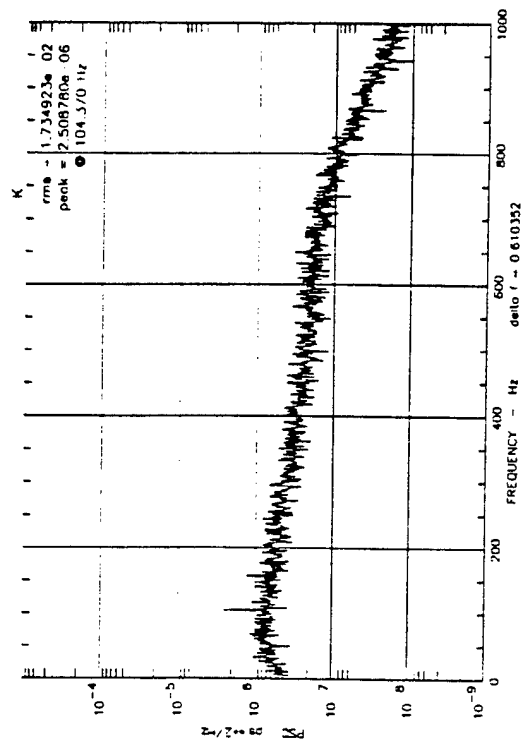
F 15 TPN 3373: alpha=16 beta= 4 bp=45



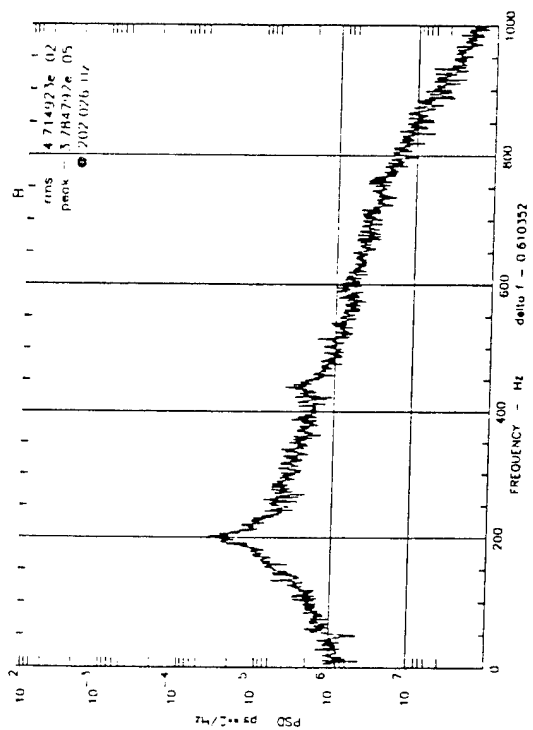




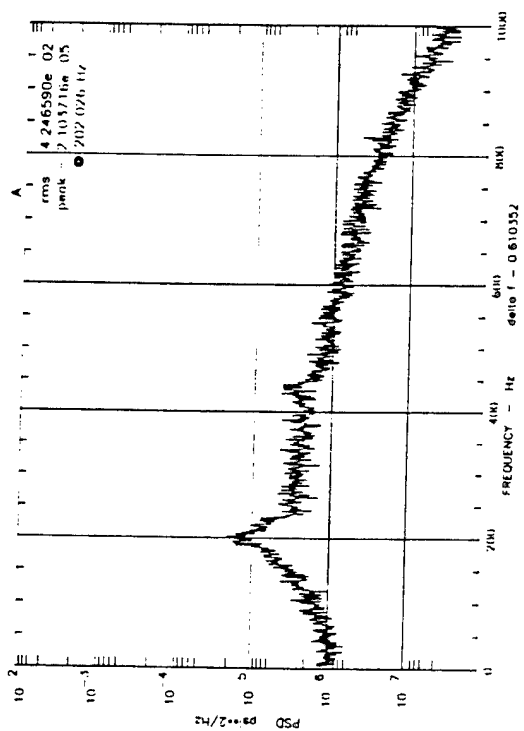
F 15 TPN 3373: alpha=16 beta= -4 bp=45



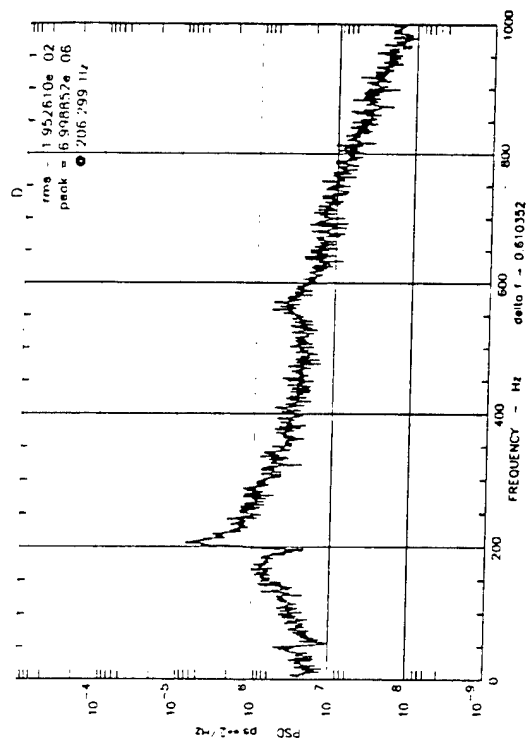
F 15 TPN 3375; alpha=20 beta= 4 bp=45



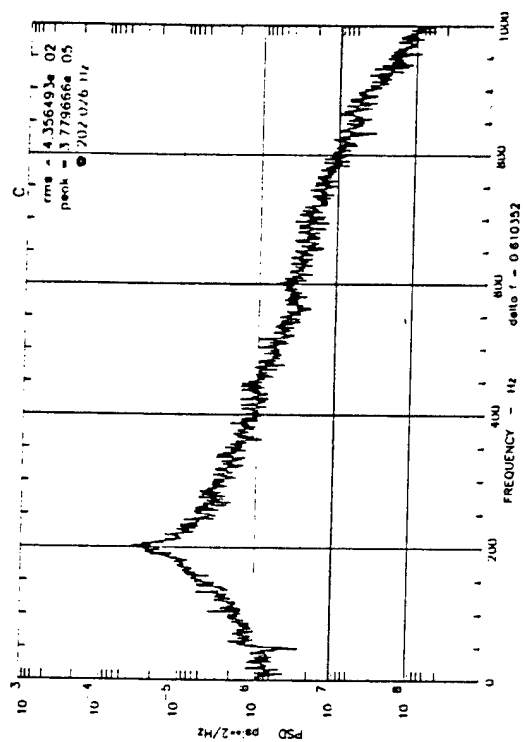
F 15 TPN 3375; alpha=20 beta= 4 bp=45



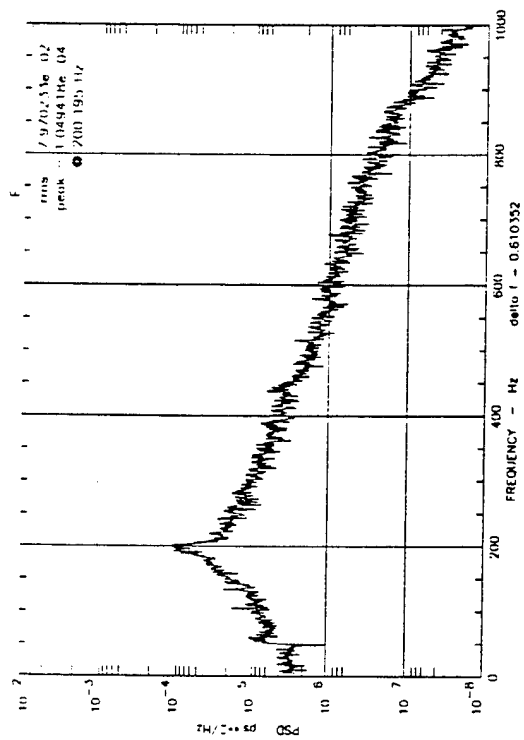
F 15 TPN 3375; alpha=20 beta= 4 bp=45



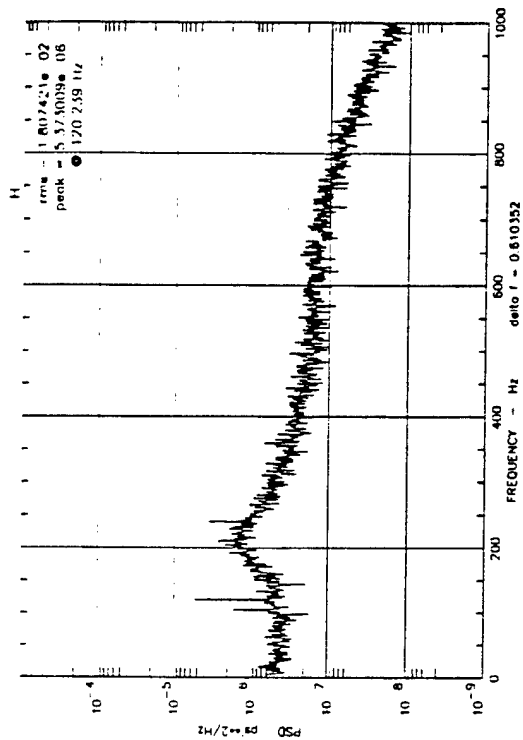
F 15 TPN 3375; alpha=20 beta= 4 bp=45



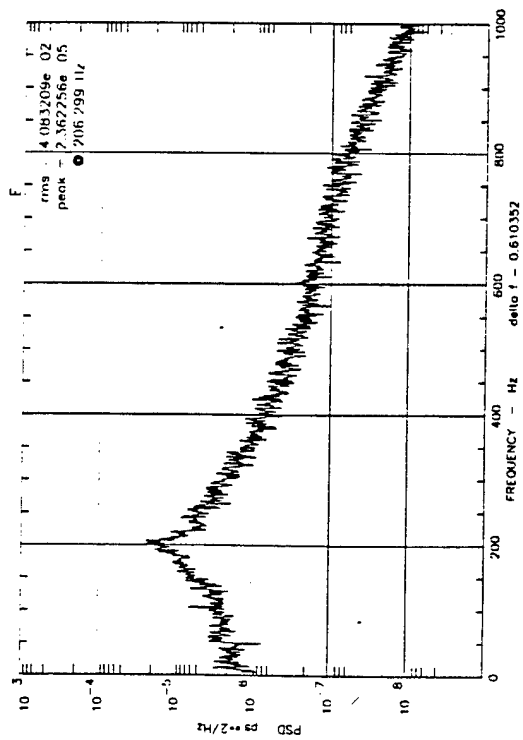
F 15 TPN 3375; alpha=20 beta= 4 bp=45



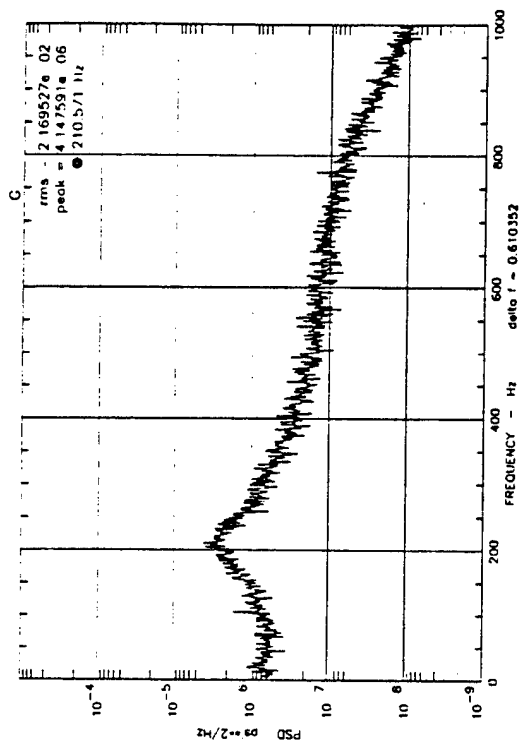
F 15 TPN 3375; alpha=20 beta= 4 bp=45



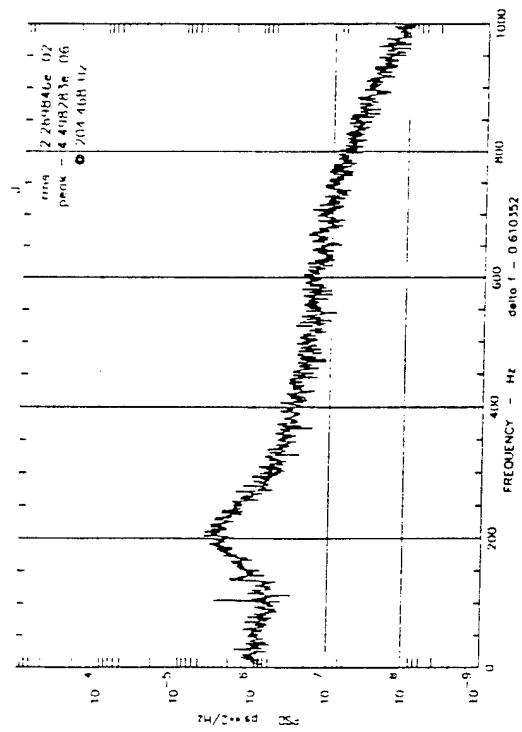
F 15 TPN 3375; alpha=20 beta= 4 bp=45



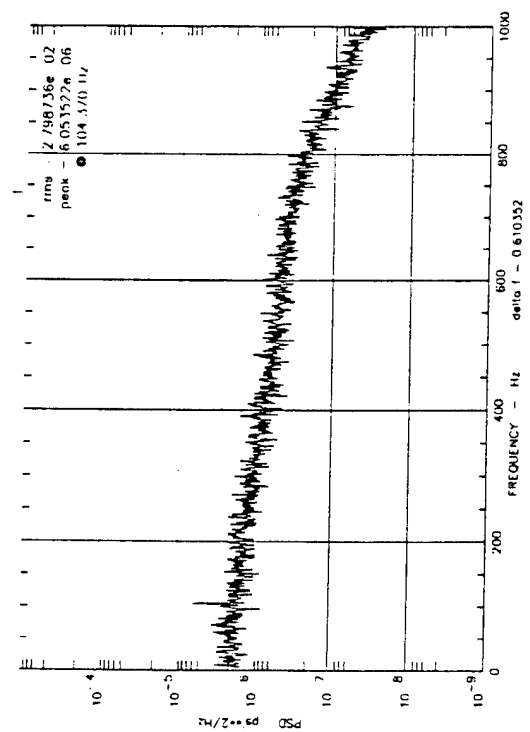
F 15 TPN 3375; alpha=20 beta= 4 bp=45



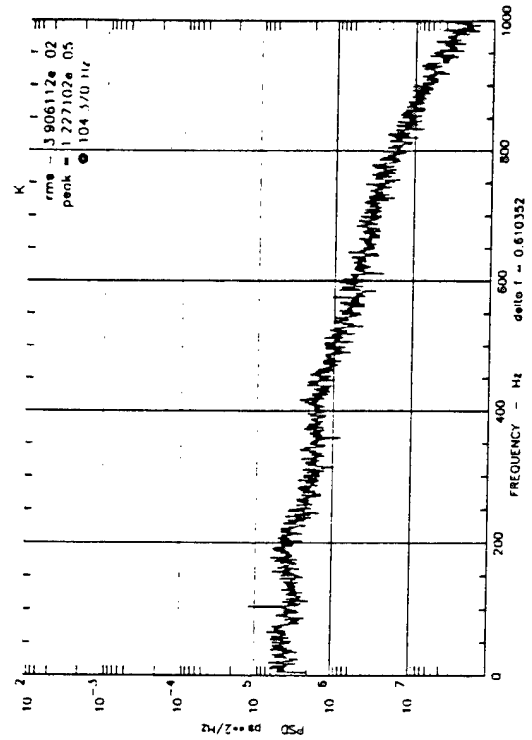
F 15 IPN 3375; alpha=20 beta= 4 bp 45



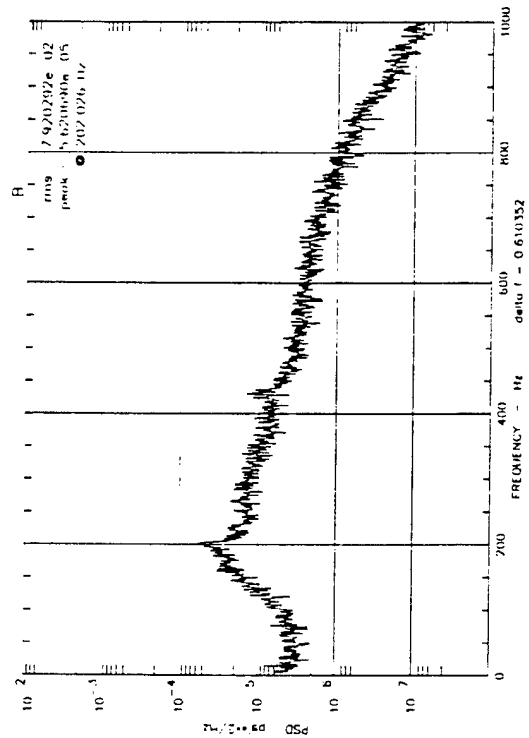
F 15 IPN 3375; alpha=20 beta= 4 bp 45



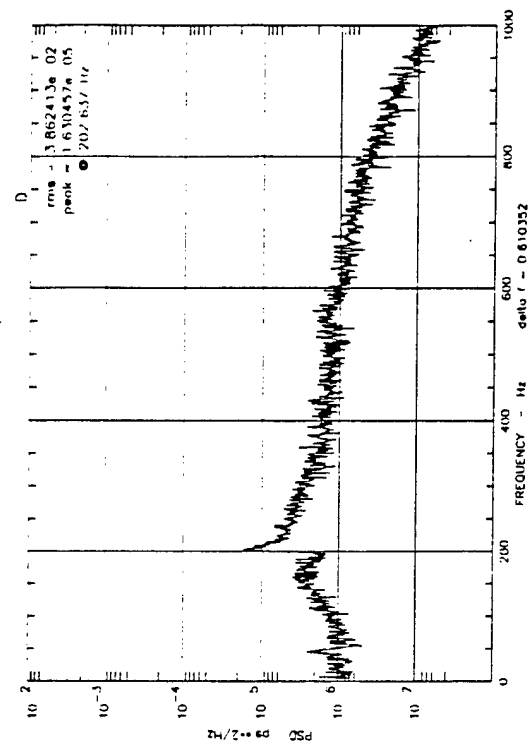
F 15 IPN 3375; alpha=20 beta= 4 bp 45



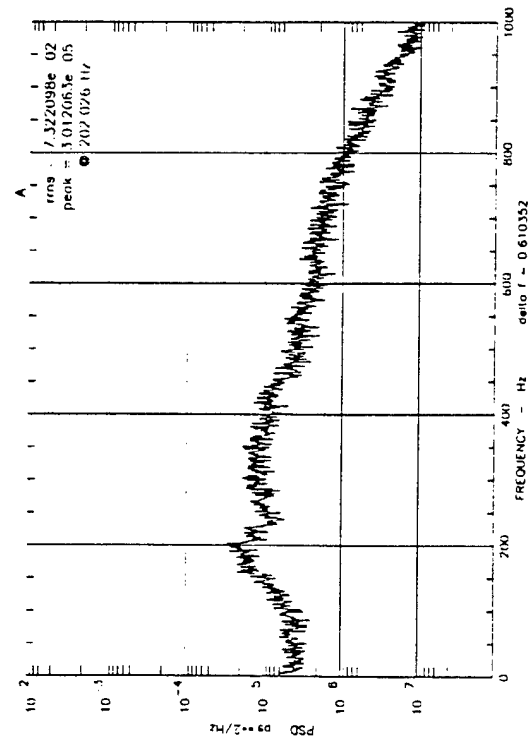
F 15 TPN 3377: alpha=24 beta= 4 bp 45



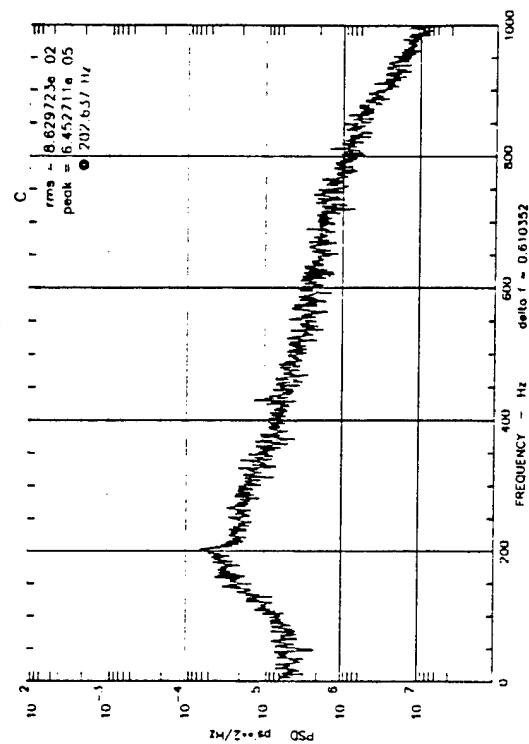
F 15 TPN 3377: alpha=24 beta= 4 bp 45



F 15 TPN 3377: alpha=24 beta= 4 bp 45

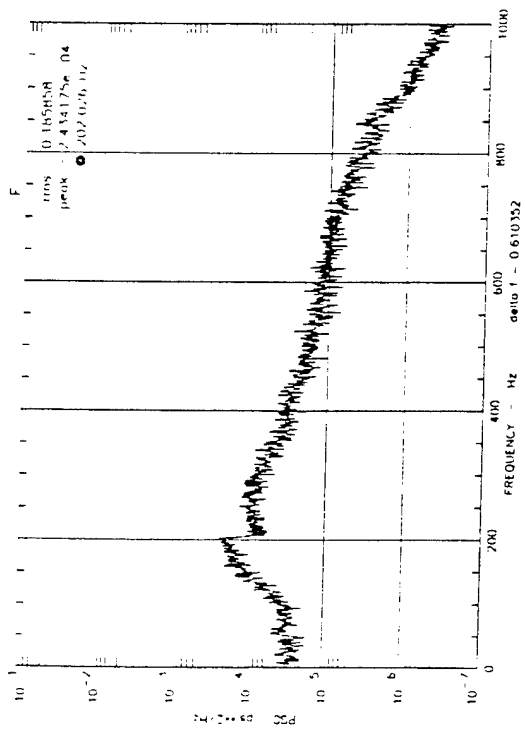


F 15 TPN 3377: alpha=24 beta= 4 bp 45

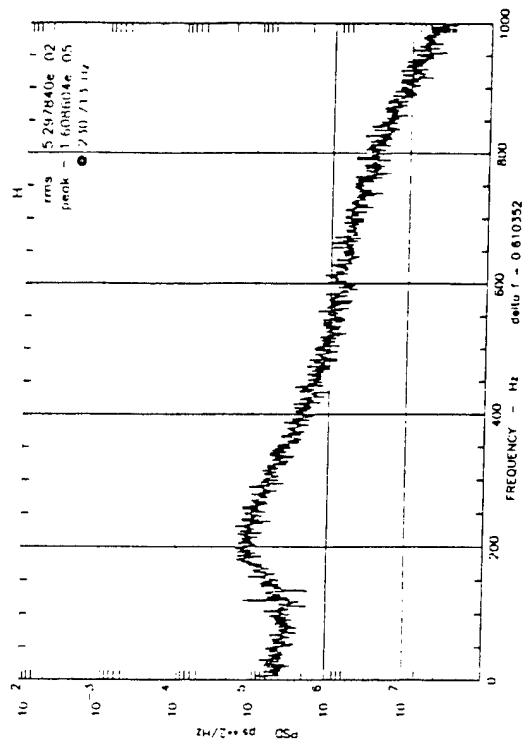




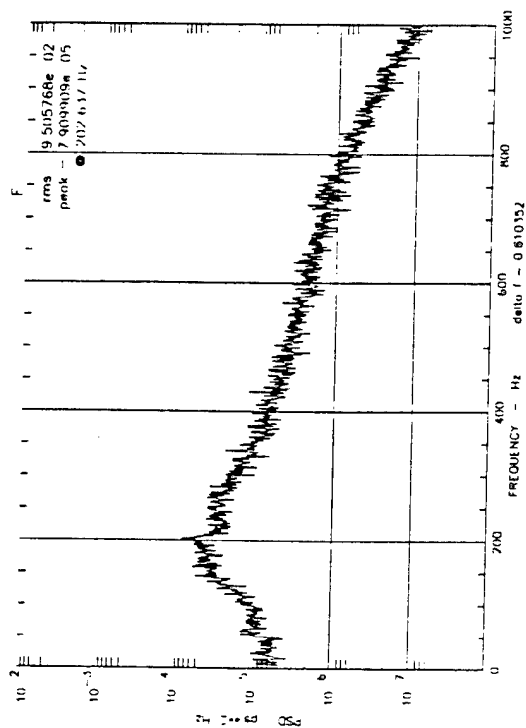
F 15 IPN 3377: alpha=24 beta= 4 bp=45



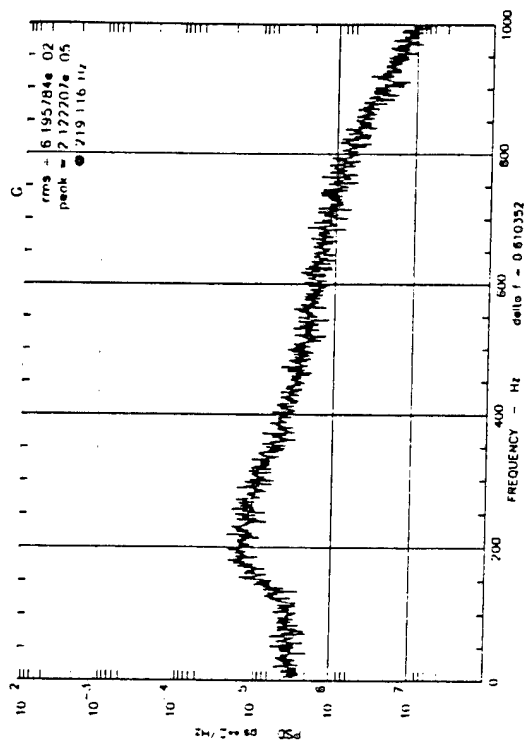
F 15 IPN 3377: alpha=24 beta= 4 bp=45



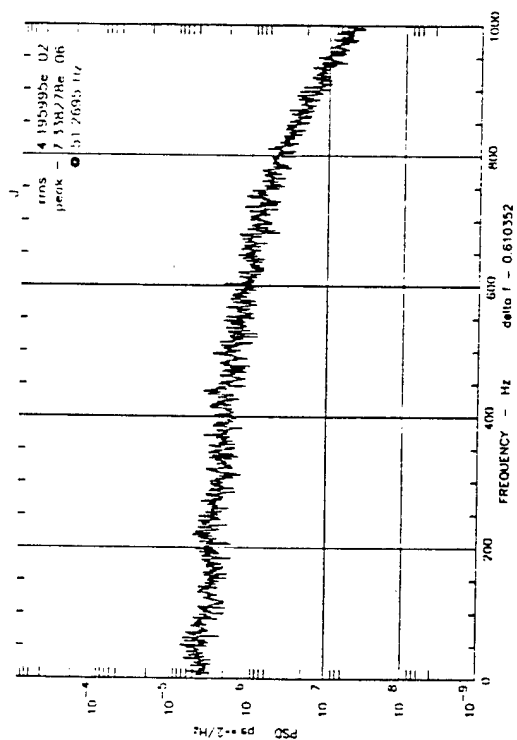
F 15 IPN 3377: alpha=24 beta= 4 bp=45



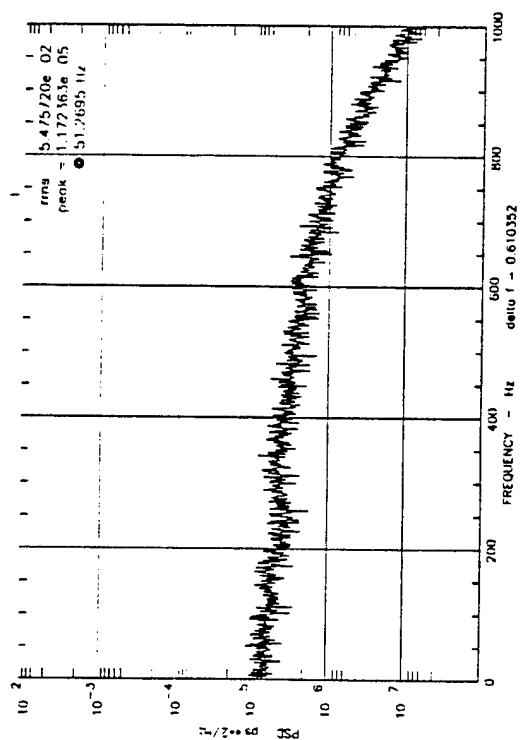
F 15 IPN 3377: alpha=24 beta= 4 bp=45



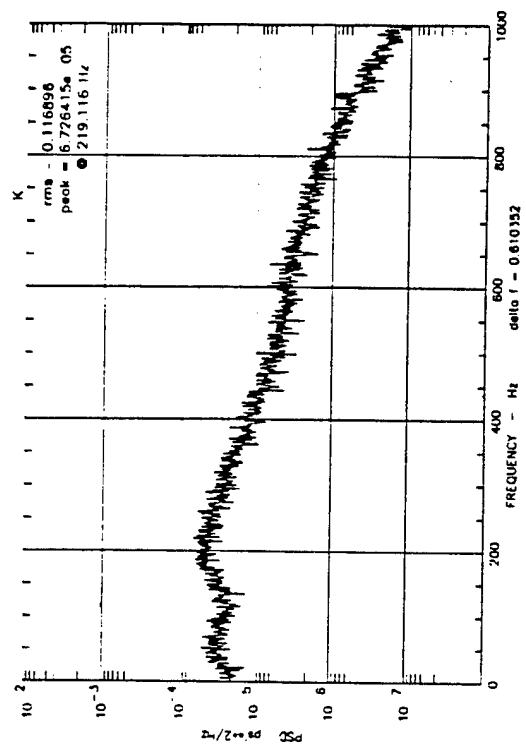
F 15 TPN 3377: alpha=24 beta=-4 bp=45



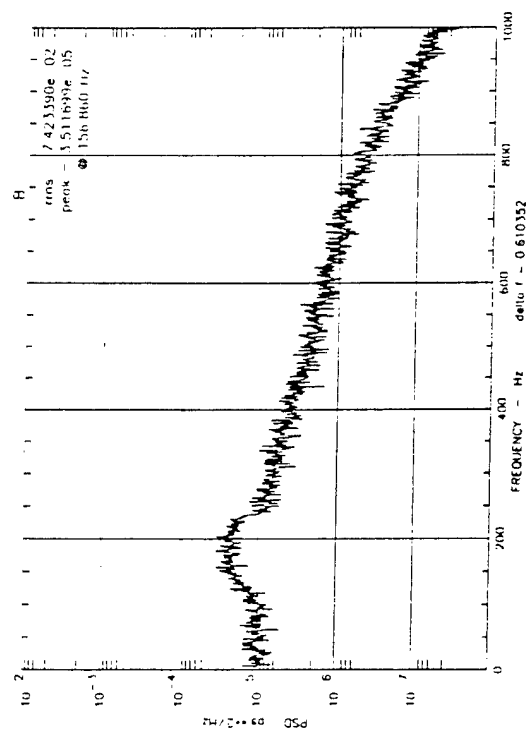
F 15 TPN 3377: alpha=24 beta=-4 bp=45



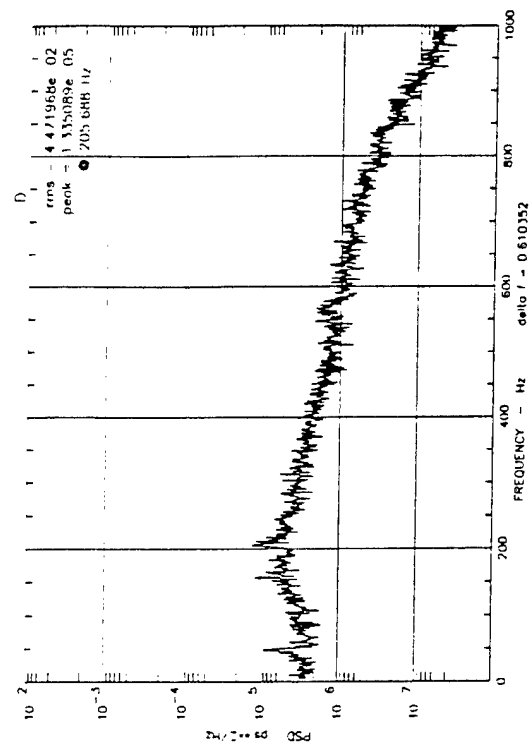
F 15 TPN 3377: alpha=24 beta=-4 bp=45



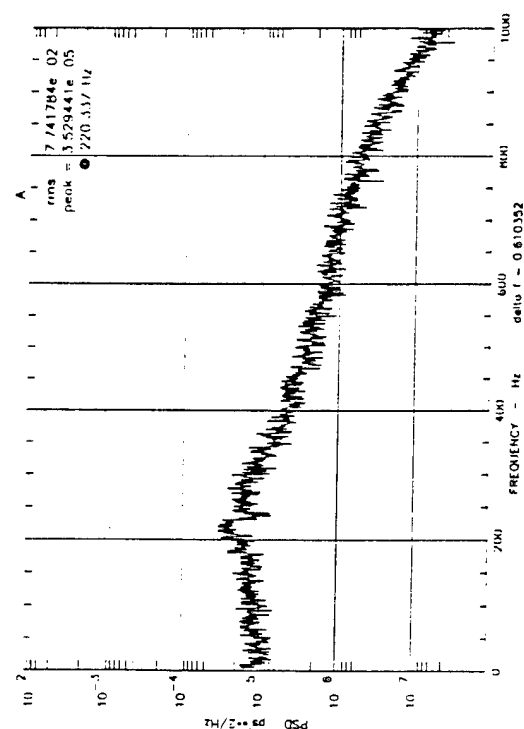
F 15 TPN 3378; alpha=28 beta= 4 bp=45



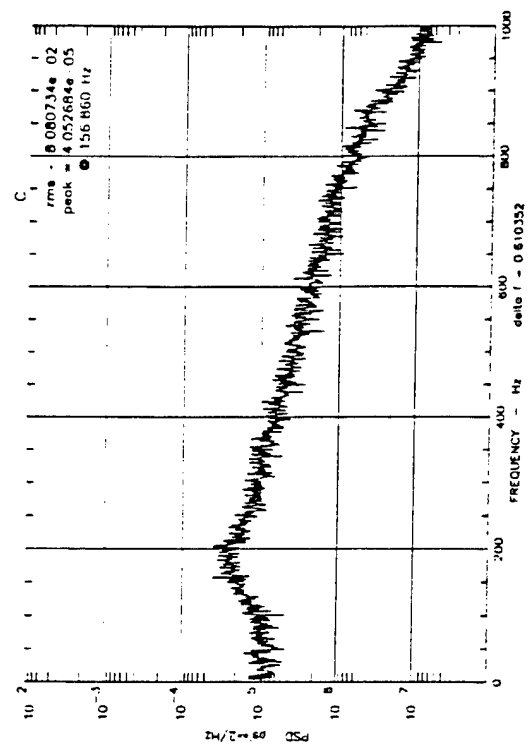
F 15 TPN 3378; alpha=28 beta= 4 bp=45



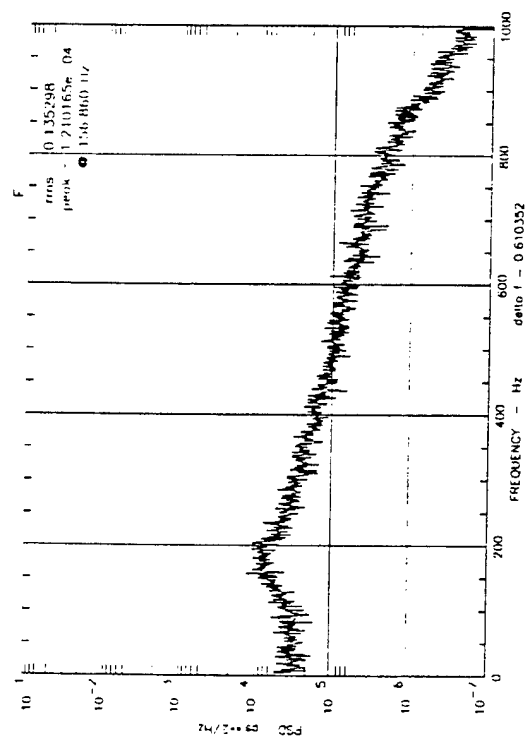
F 15 TPN 3378; alpha=28 beta= 4 bp=45



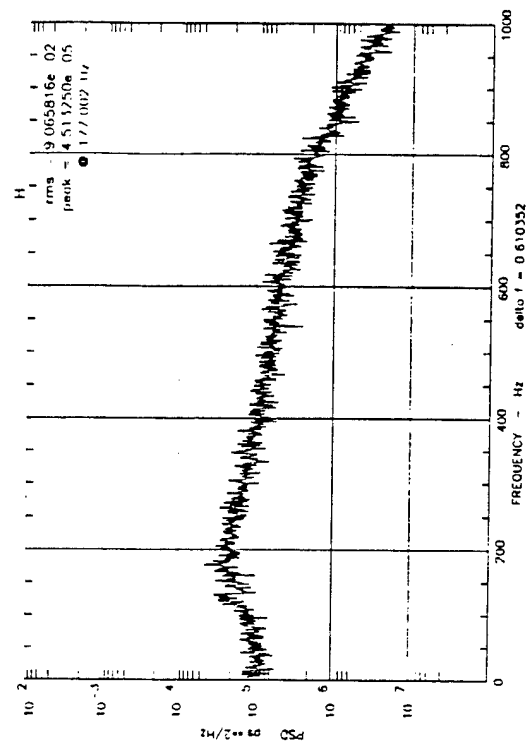
F 15 TPN 3378; alpha=28 beta= 4 bp=45



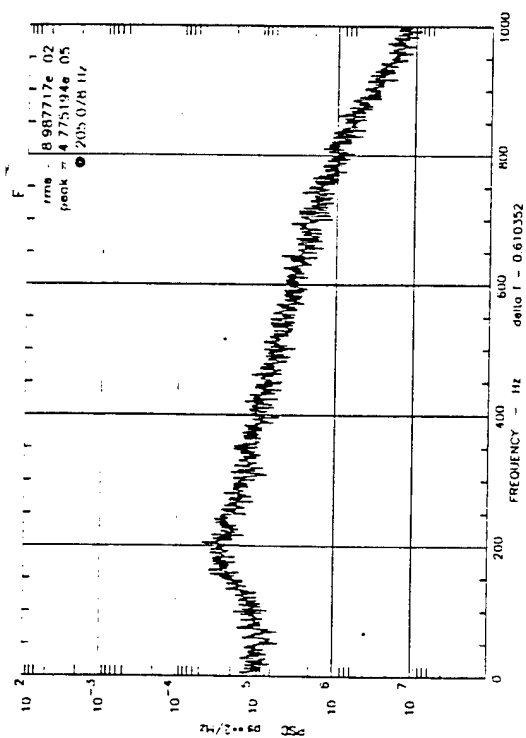
F 15 IPN 3378;  $\alpha=28$   $\beta=45$



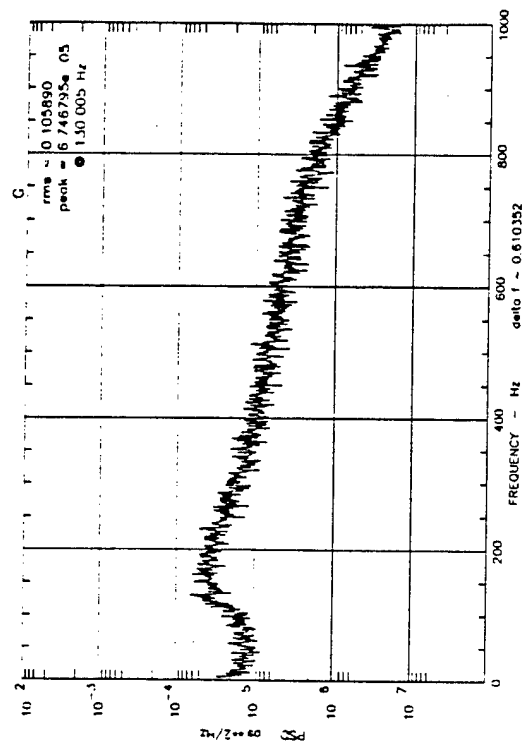
F 15 IPN 3378;  $\alpha=28$   $\beta=45$



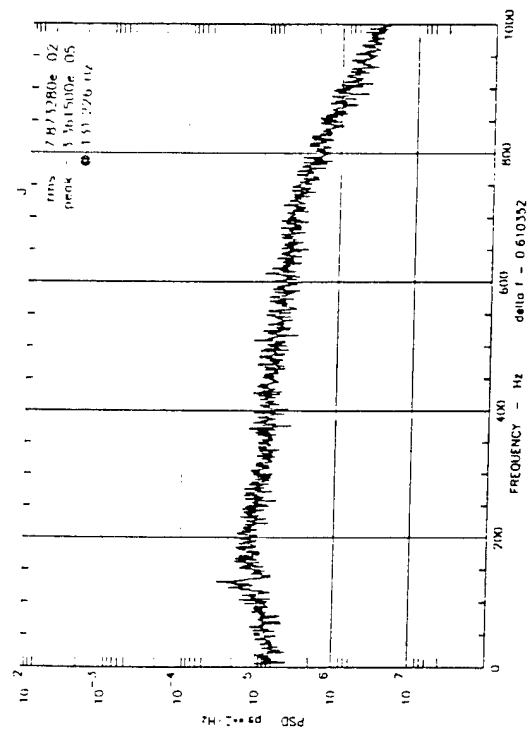
F 15 IPN 3378;  $\alpha=28$   $\beta=45$



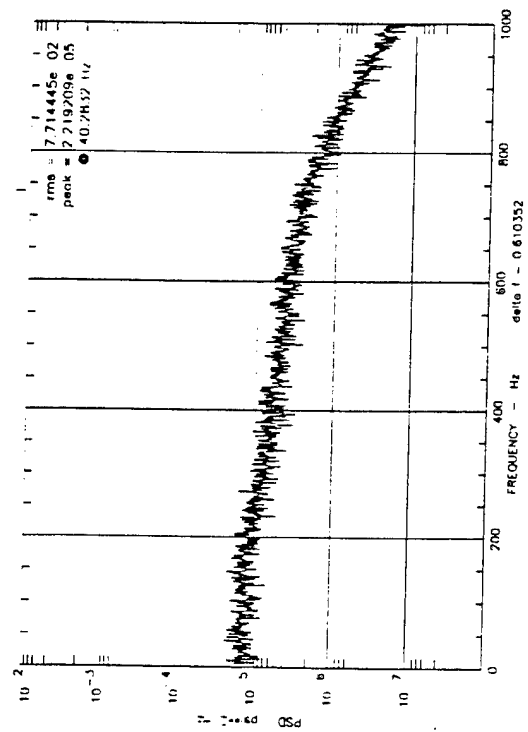
F 15 IPN 3378;  $\alpha=28$   $\beta=45$



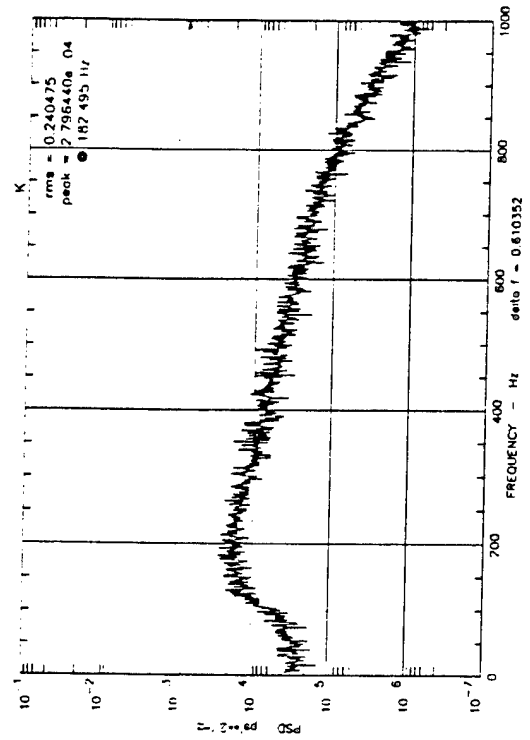
F 15 TPN 3378; alpha=28 beta= 4 bp=45



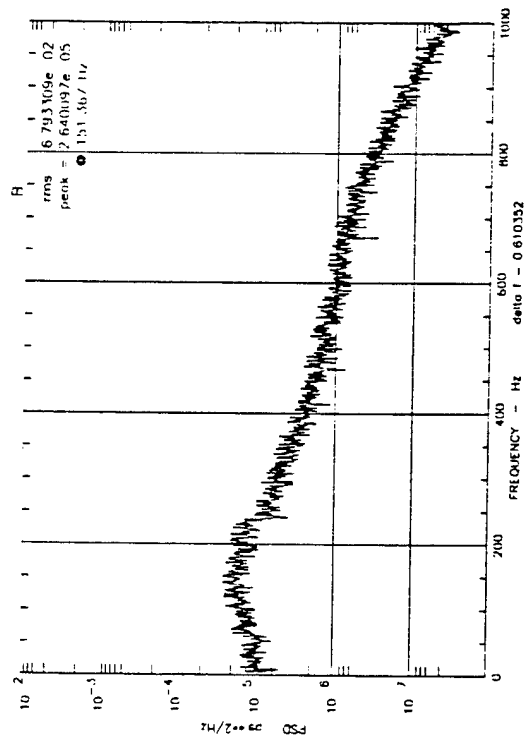
F 15 TPN 3378; alpha=28 beta= 4 bp=45



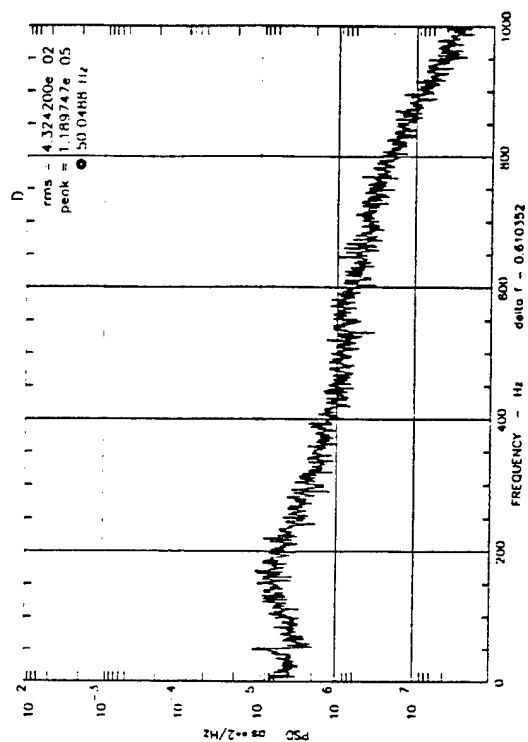
F 15 TPN 3378; alpha=28 beta= 4 bp=45



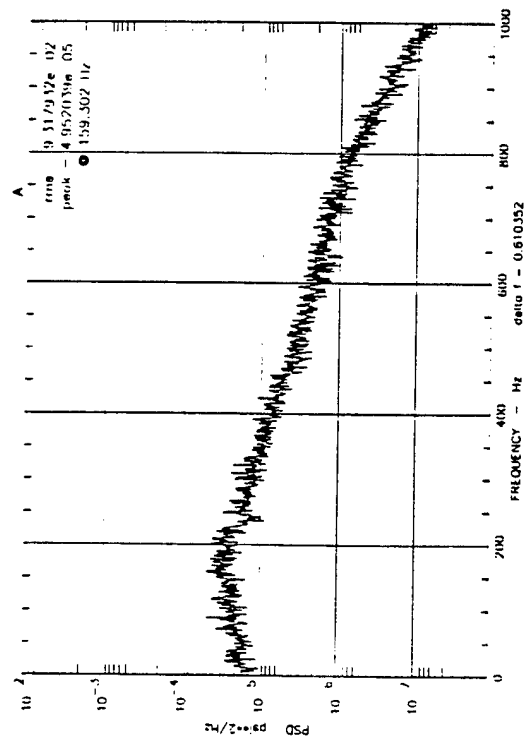
F 15 TPN 3379; alpha=32 beta= 4 bp=45



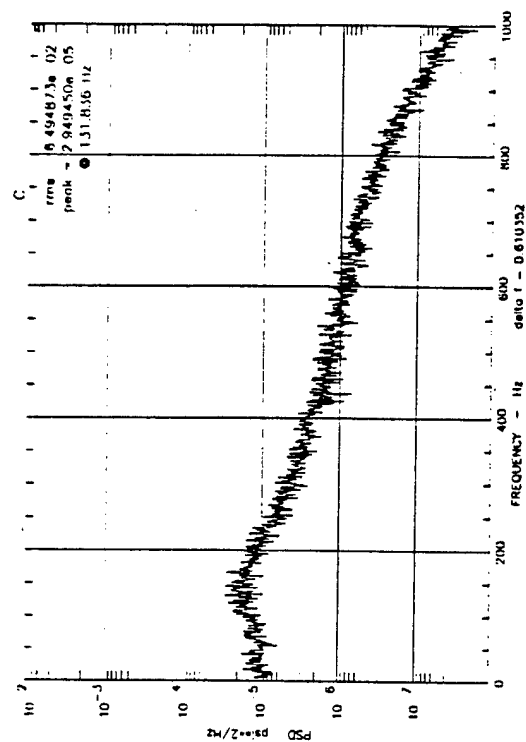
F 15 TPN 3379; alpha=32 beta= 4 bp=45

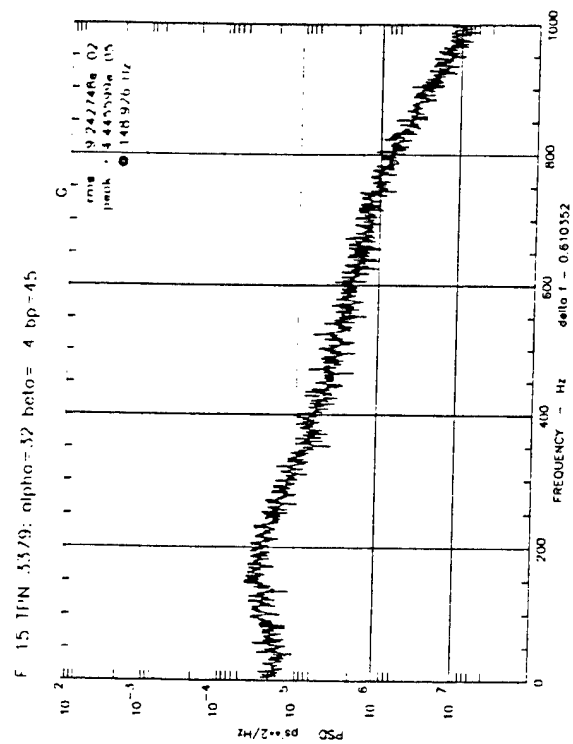
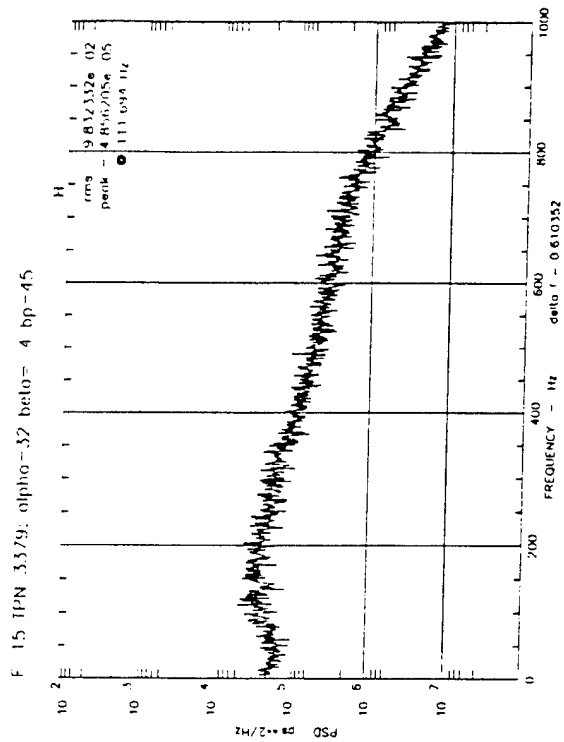
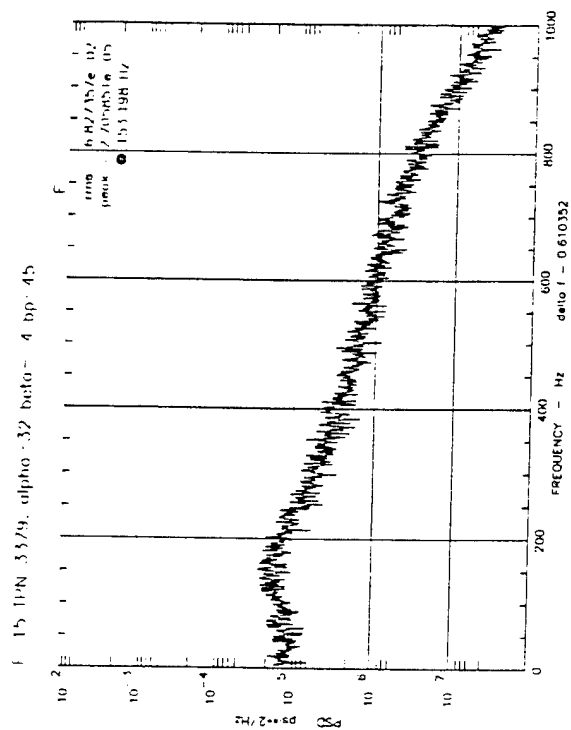
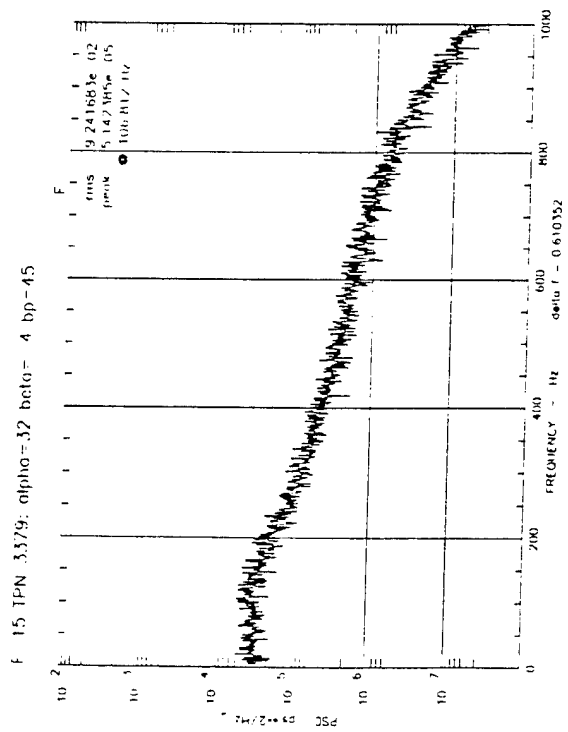


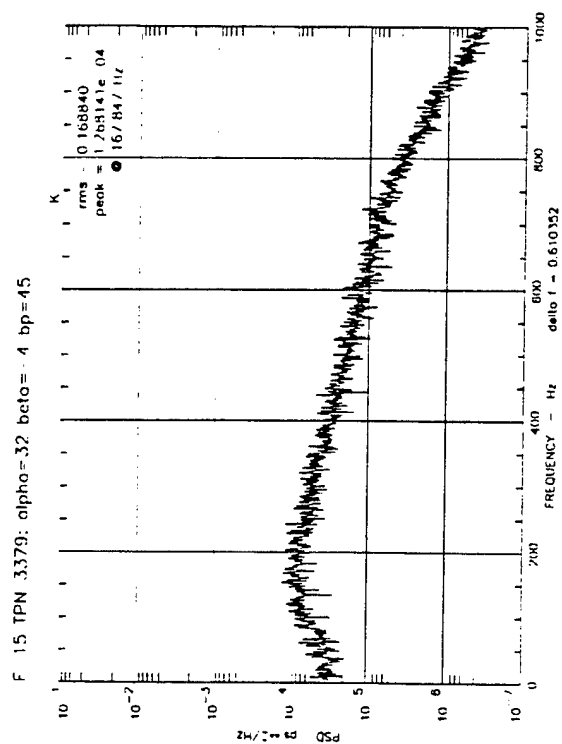
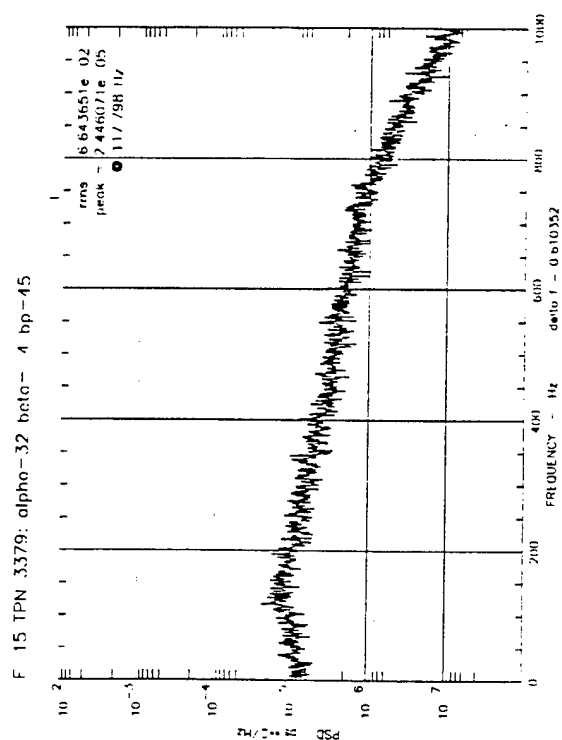
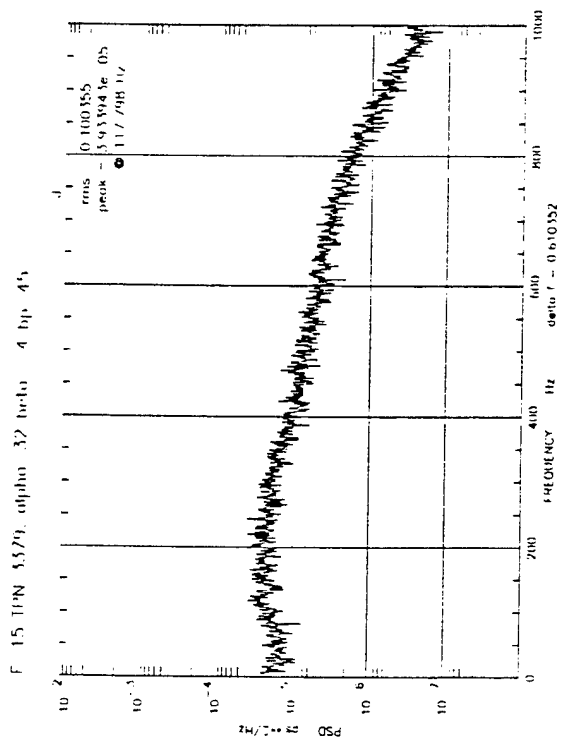
F 15 TPN 3379; alpha=32 beta= 4 bp=45



F 15 TPN 3379; alpha=32 beta= 4 bp=45

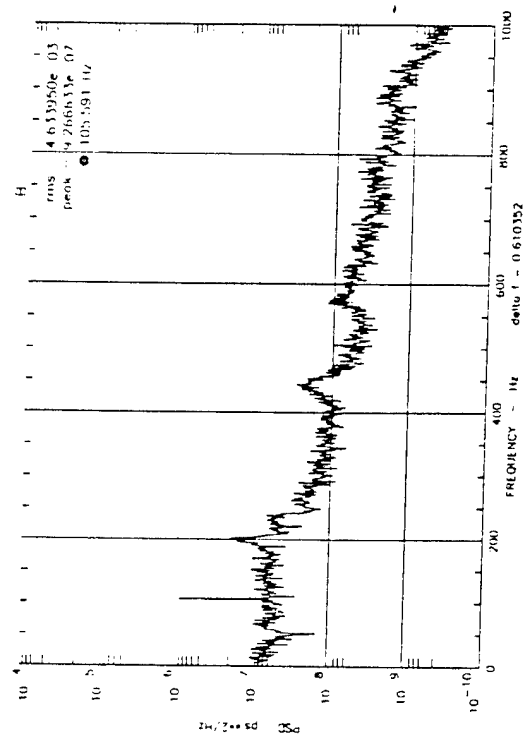




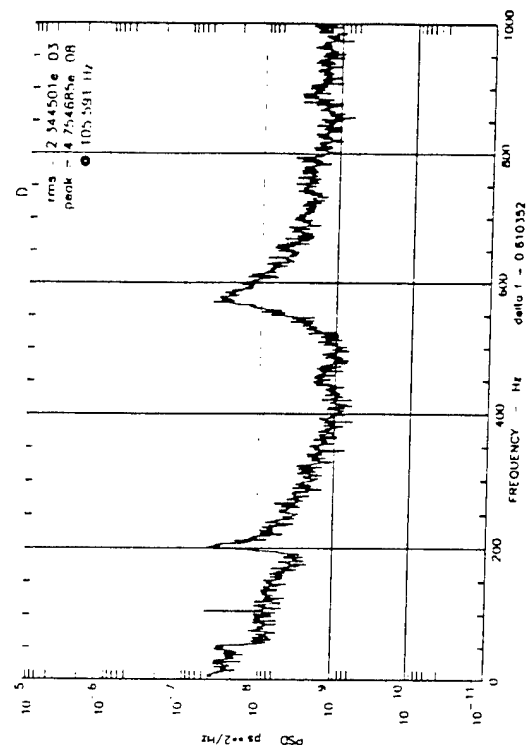




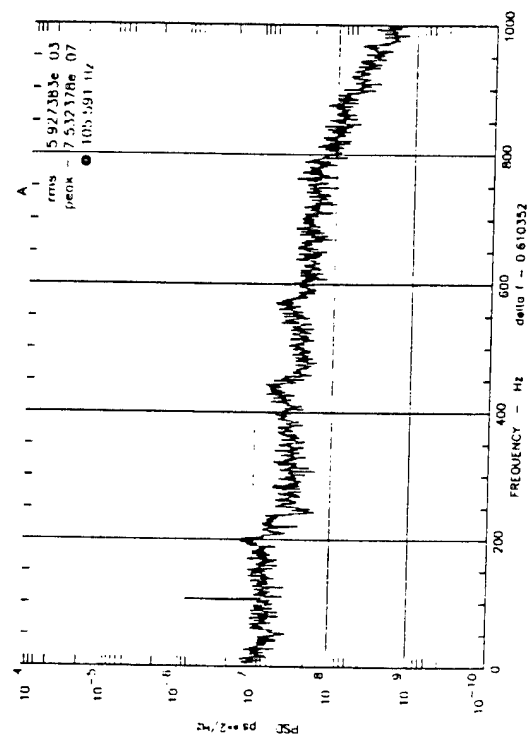
F 15 TPN 3044; alpha=16 beta=4 bp=65



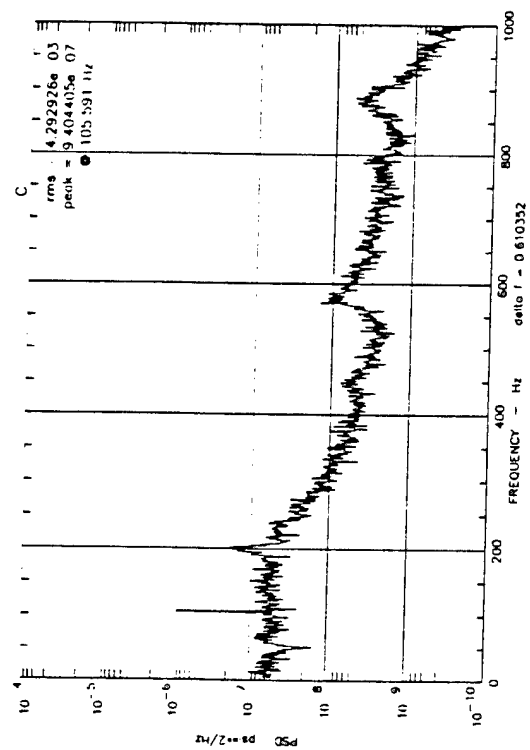
F 15 TPN 3044; alpha=16 beta=4 bp=65



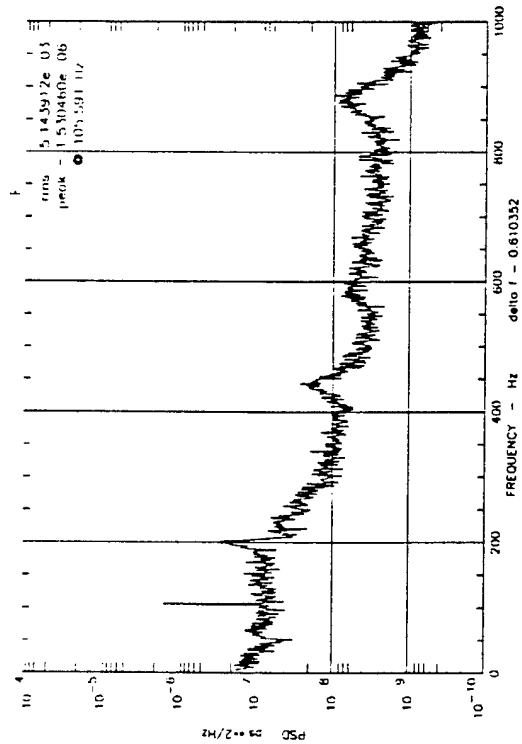
F 15 TPN 3044; alpha=16 beta=4 bp=65



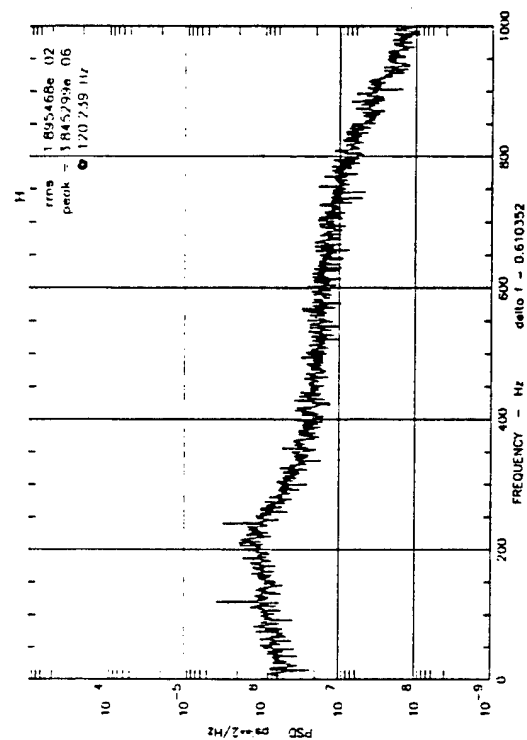
F 15 TPN 3044; alpha=16 beta=4 bp=65



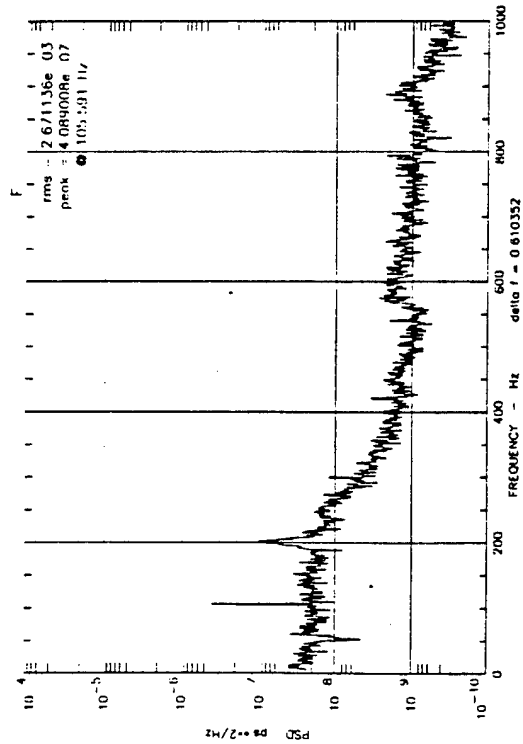
F 15 TPN 3044: alpha=16 beta=4 bp=65



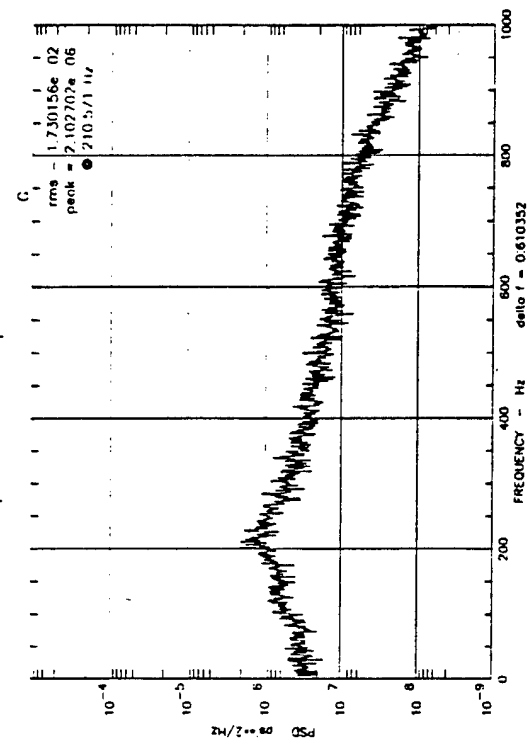
F 15 TPN 3044: alpha=16 beta=4 bp=65

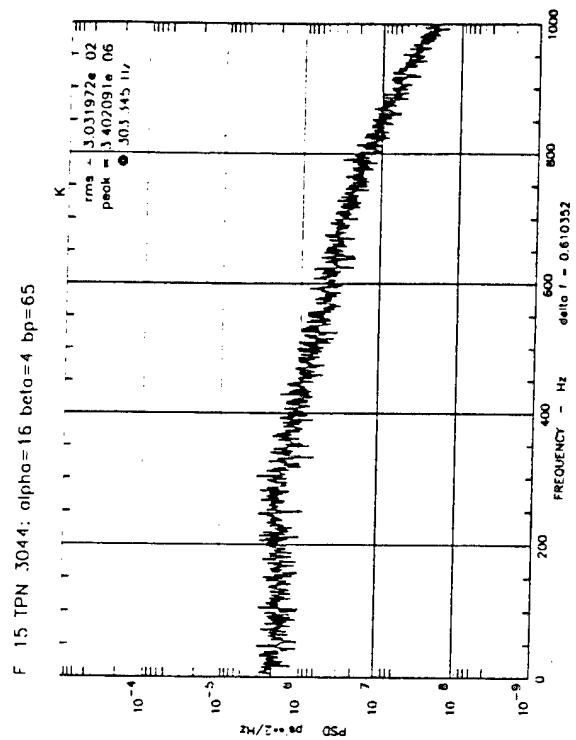
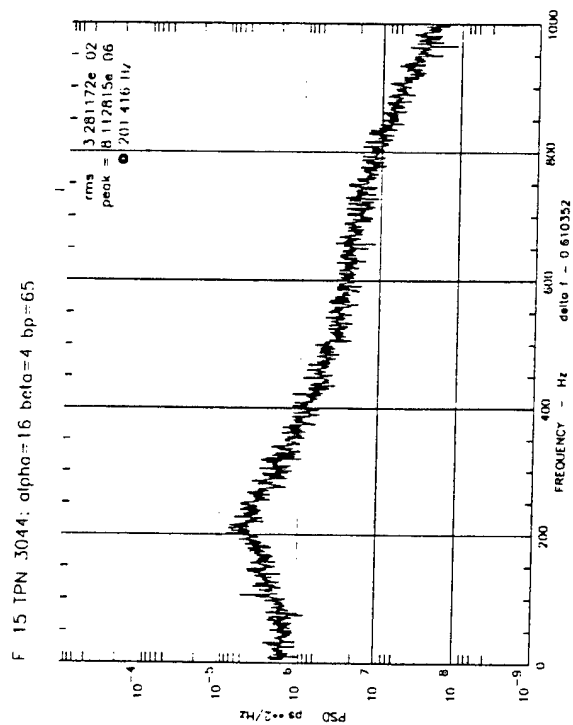
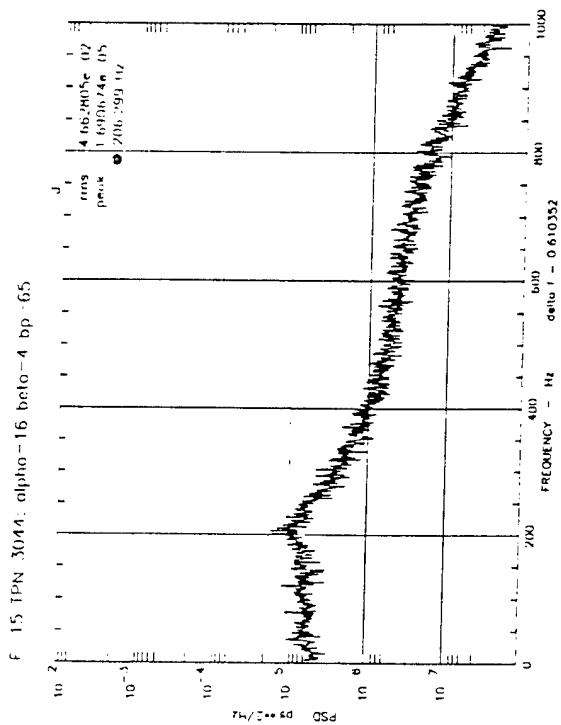


F 15 TPN 3044: alpha=16 beta=4 bp=65

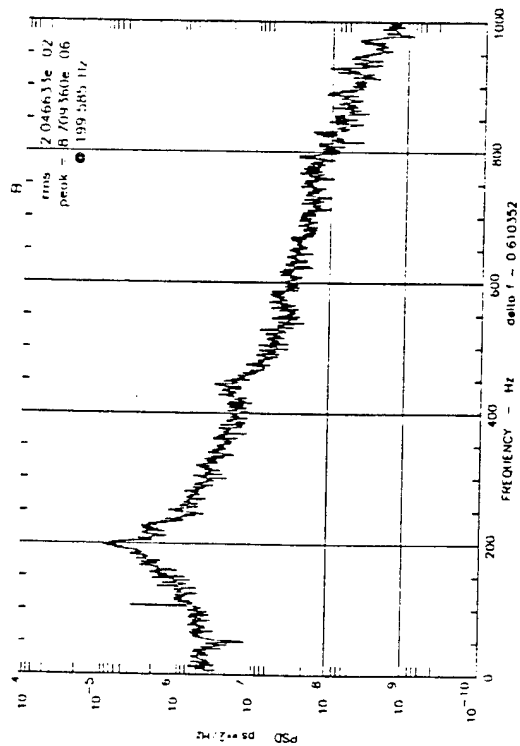


F 15 TPN 3044: alpha=16 beta=4 bp=65

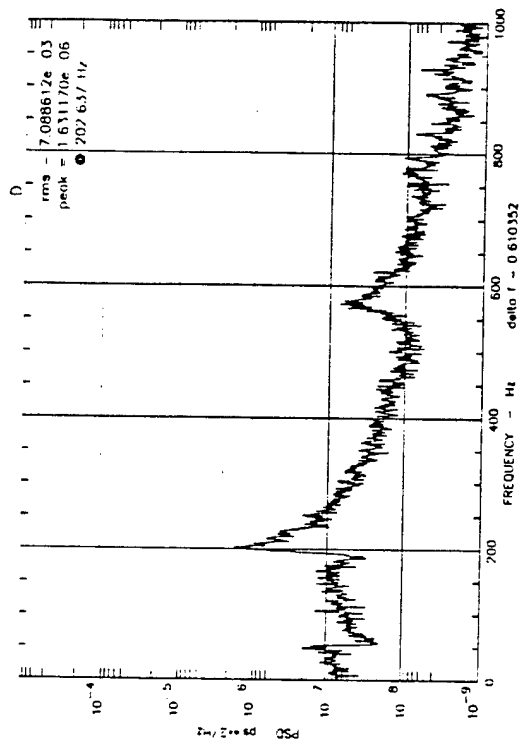




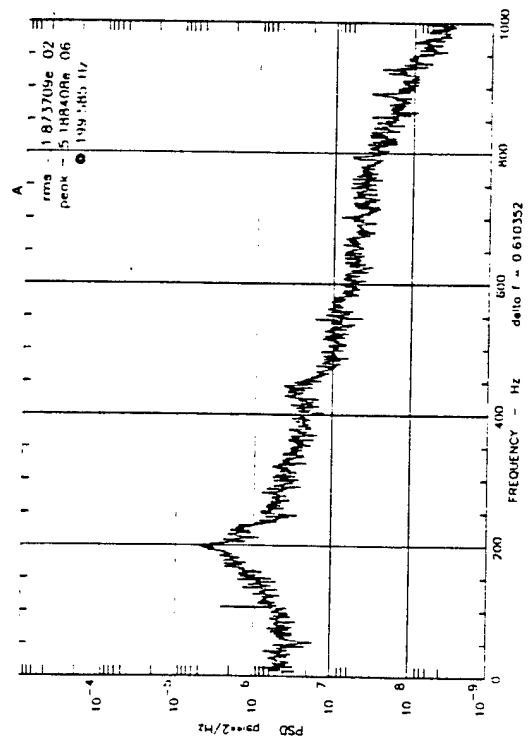
F 15 IPN 3046: alpha=20 beta=4 bp=65



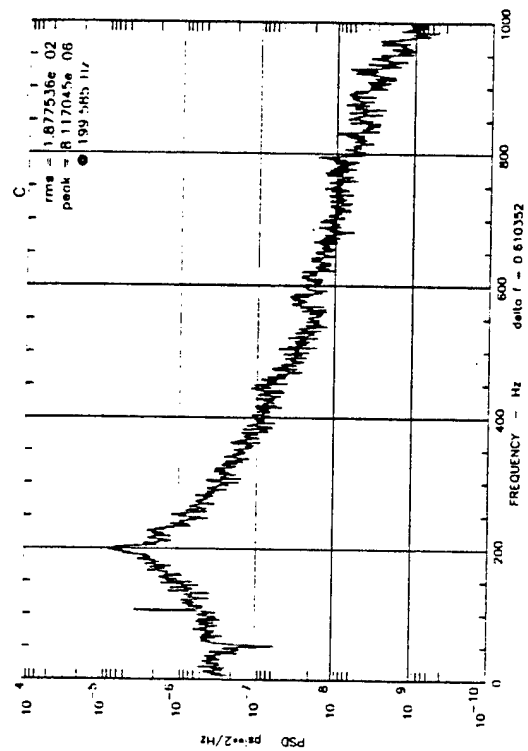
F 15 IPN 3046: alpha=20 beta=4 bp=65



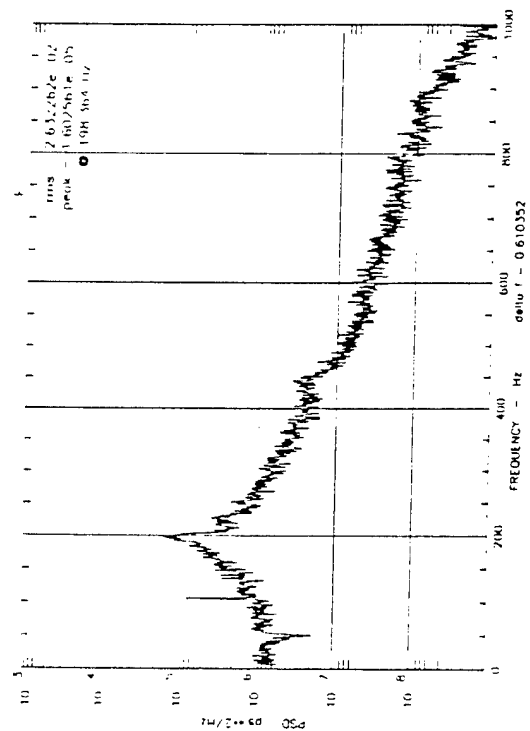
F 15 IPN 3046: alpha=20 beta=4 bp=65



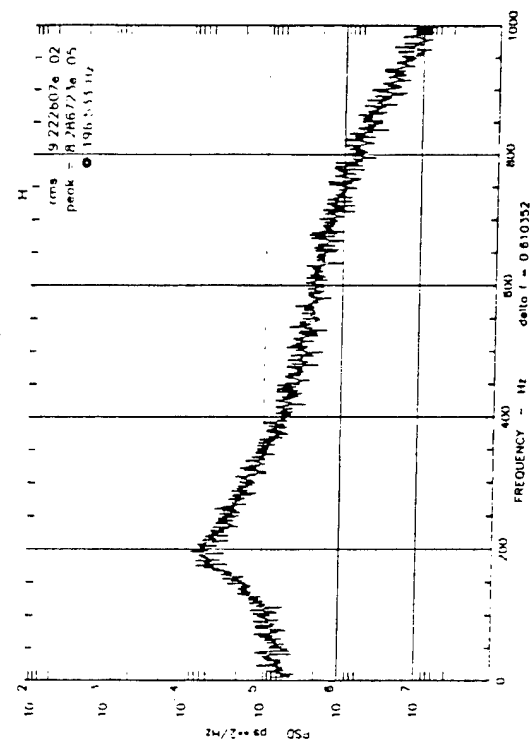
F 15 IPN 3046: alpha=20 beta=4 bp=65



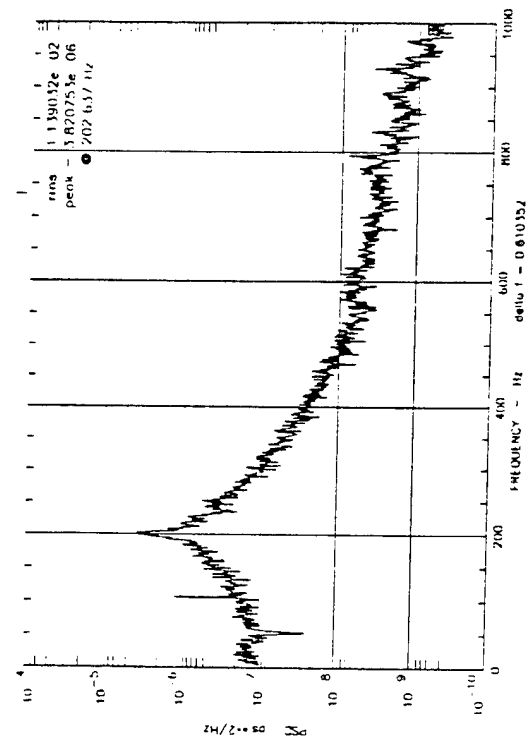
F 15 TPN 3046; alpha=20 beta=4 bp=65



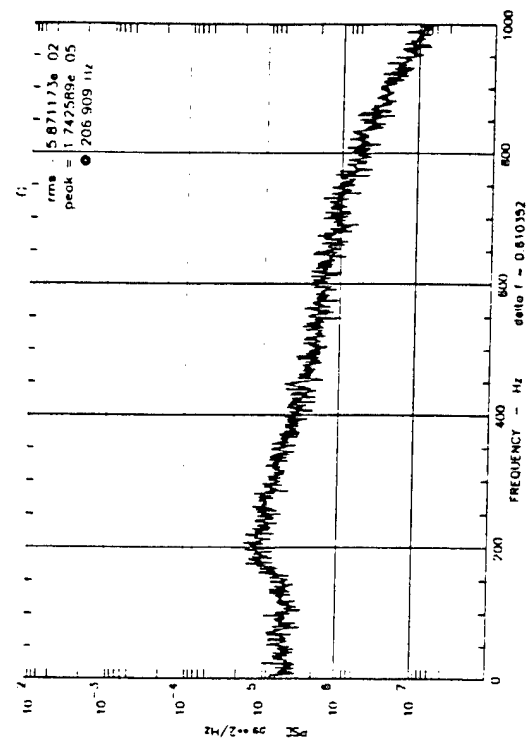
F 15 TPN 3046; alpha=20 beta=4 bp=65



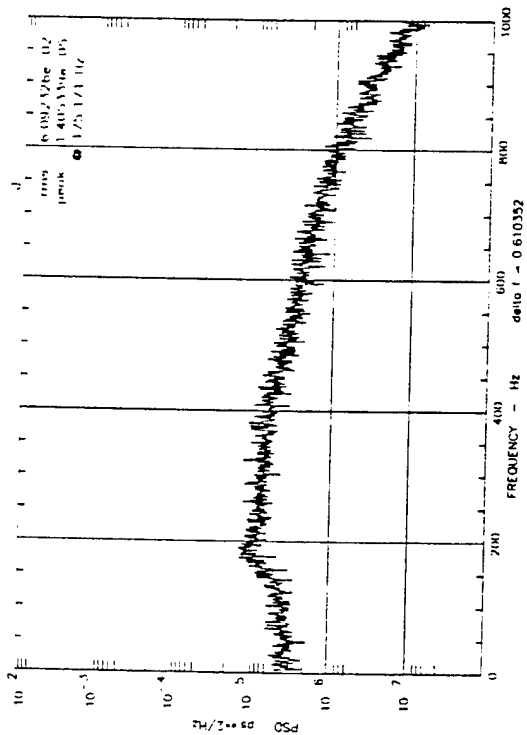
F 15 TPN 3046; alpha=20 beta=4 bp=65



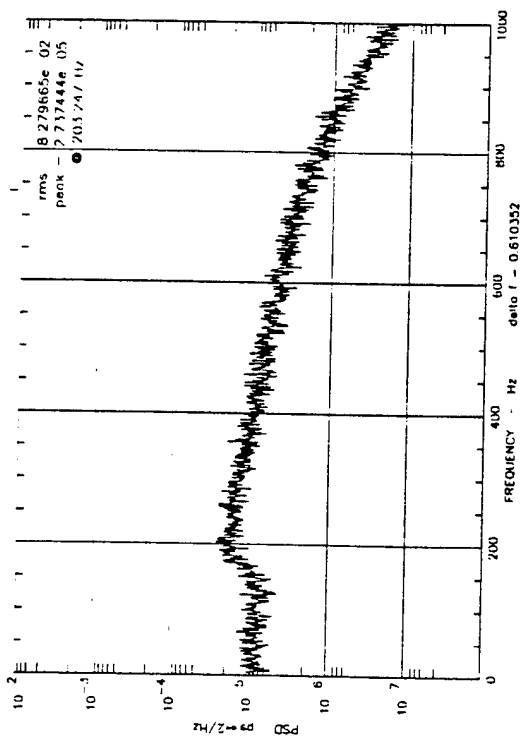
F 15 TPN 3046; alpha=20 beta=4 bp=65



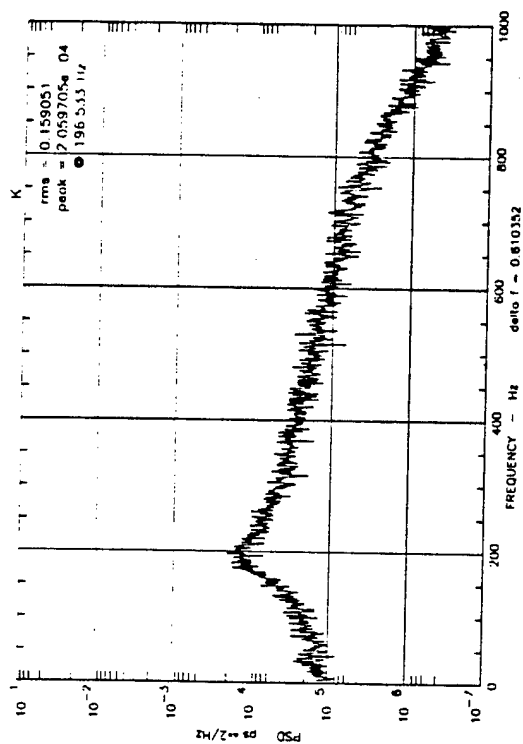
F 15 TPN 3046: alpha=20 beta=4 bp=65



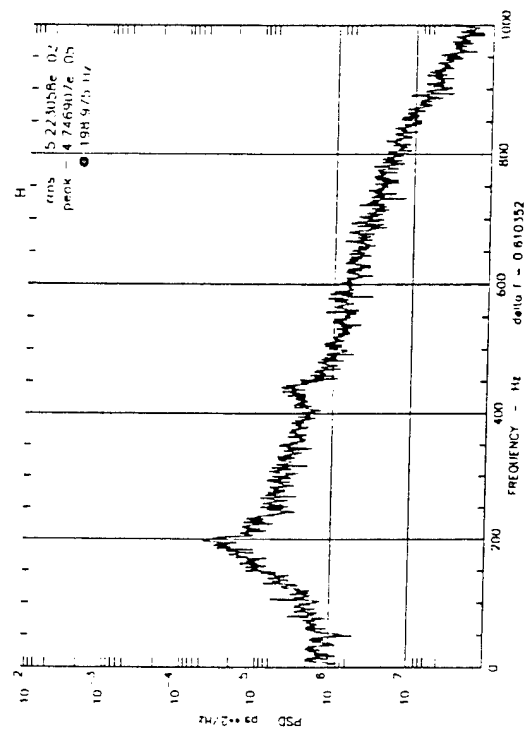
F 15 TPN 3046: alpha=20 beta=4 bp=65



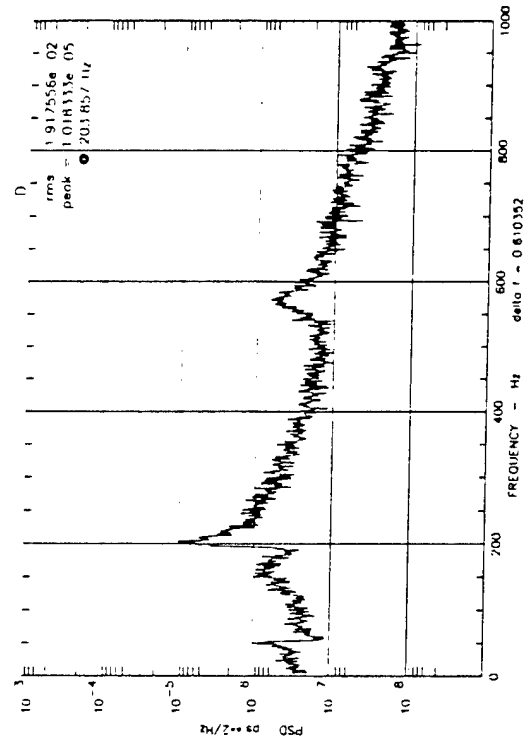
F 15 TPN 3046: alpha=20 beta=4 bp=65



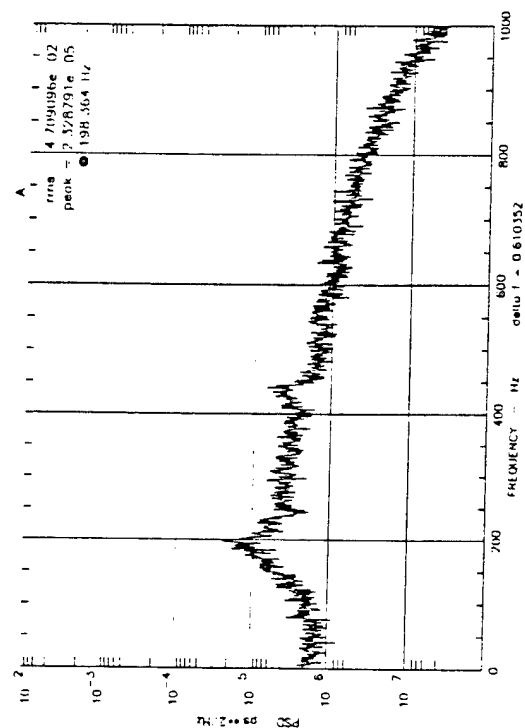
F 15 TPN 3048, alpha=24 beta=4 bp=65



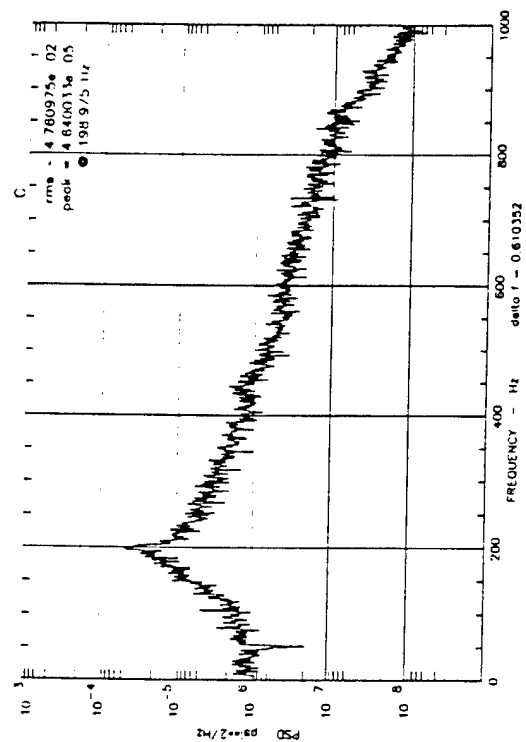
F 15 TPN 3048, alpha=24 beta=4 bp=65



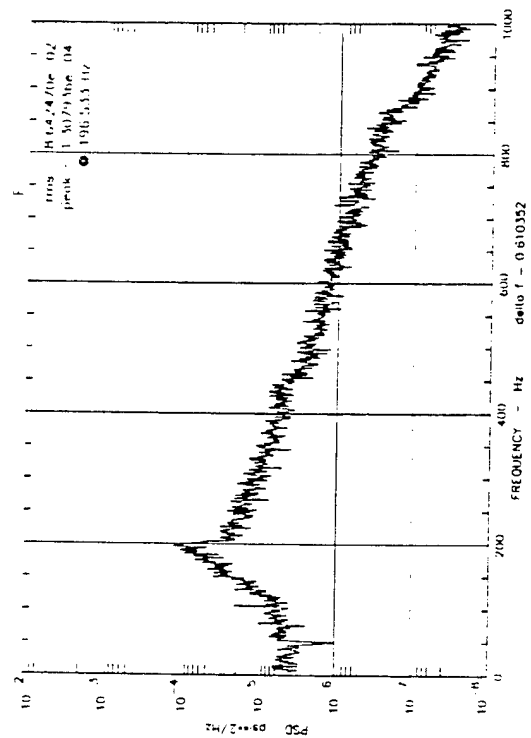
F 15 TPN 3048, alpha=24 beta=4 bp=65



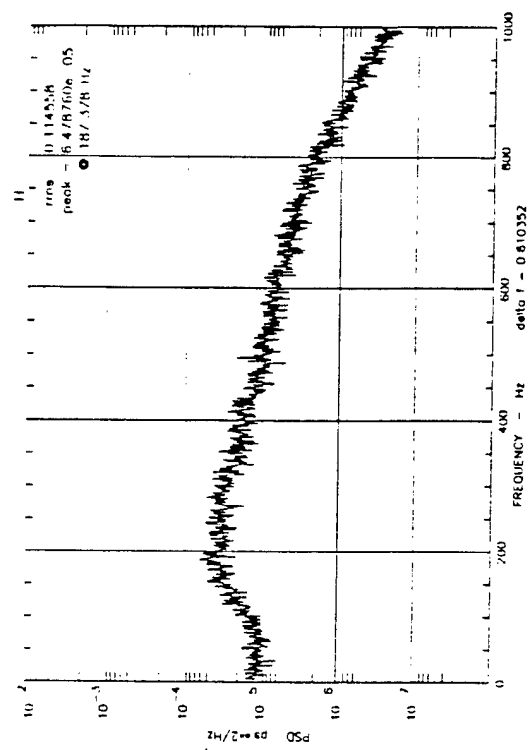
F 15 TPN 3048, alpha=24 beta=4 bp=65



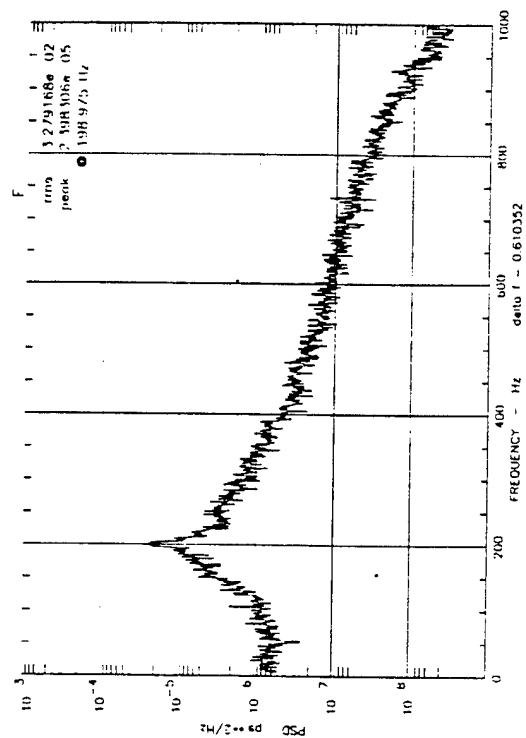
F 15 TPN 3048; alpha=24 beta=4 bp=65



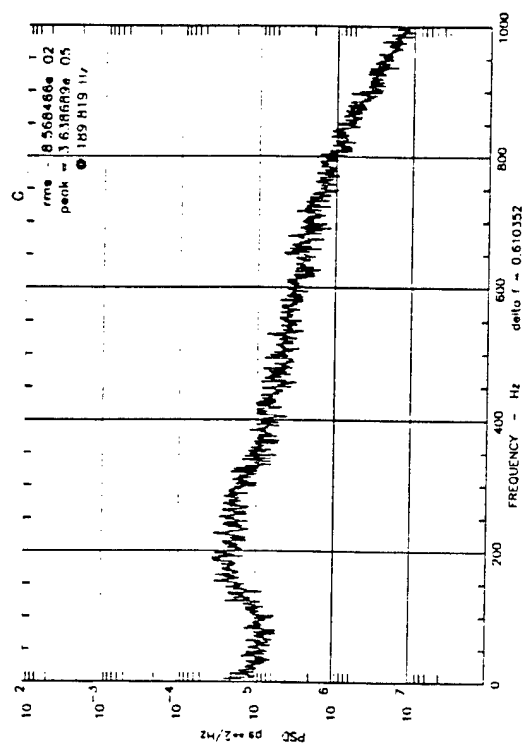
F 15 TPN 3048; alpha=24 beta=4 bp=65



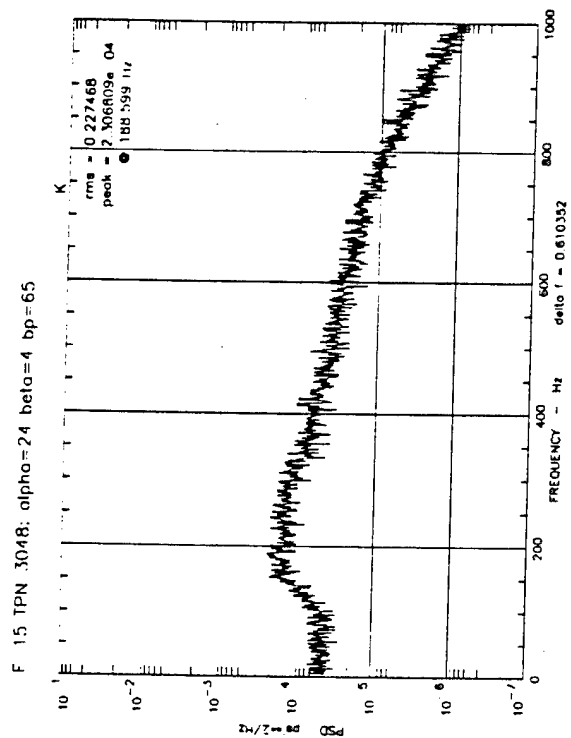
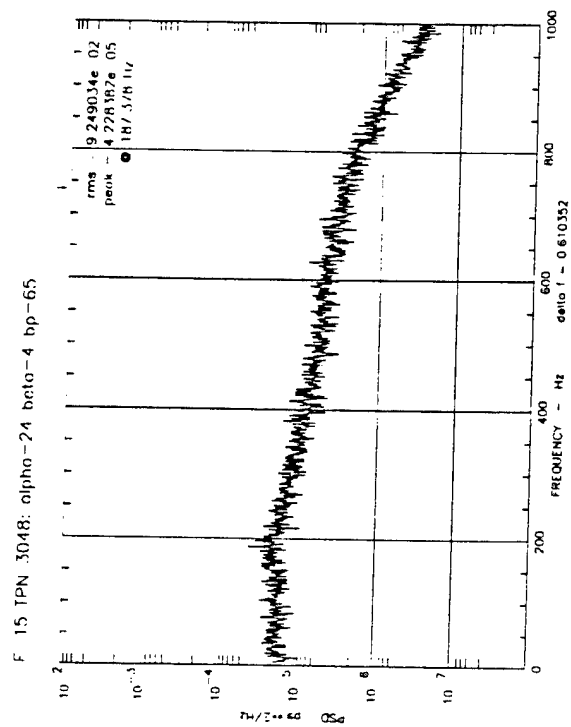
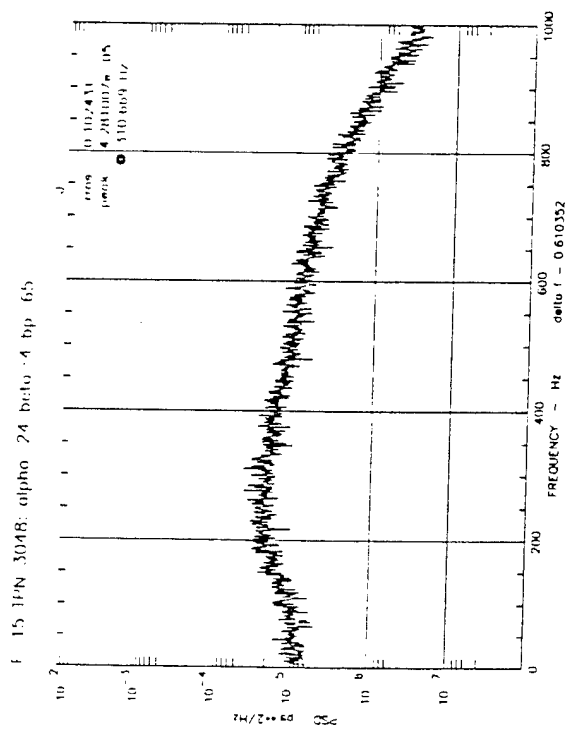
F 15 TPN 3048; alpha=24 beta=4 bp=65



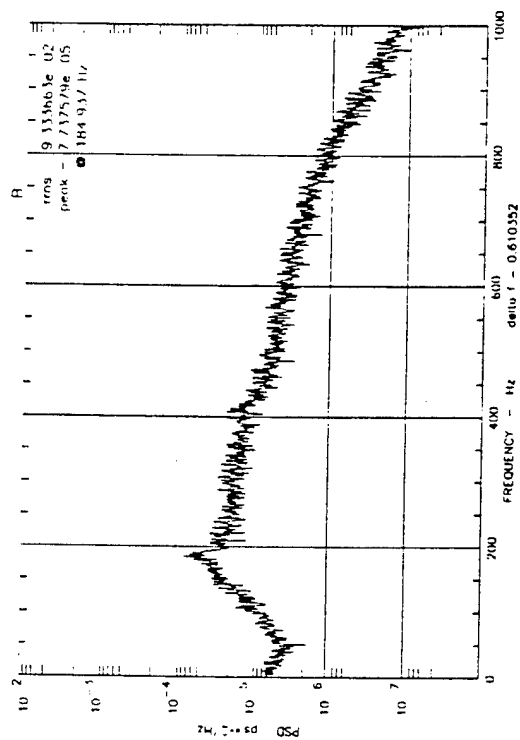
F 15 TPN 3048; alpha=24 beta=4 bp=65



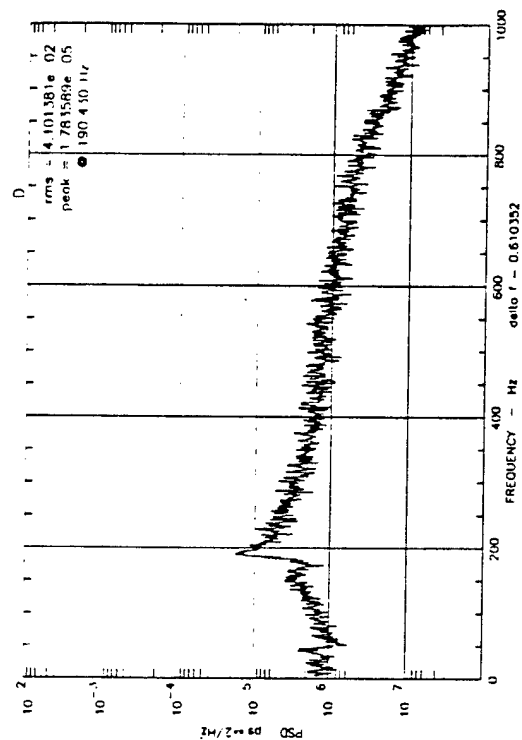




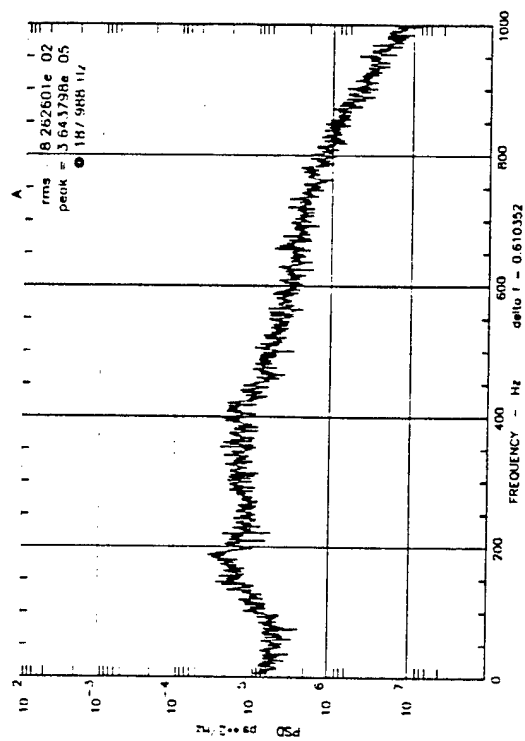
F 15 TPN 2961: alpha=28 beta=4 bp=65



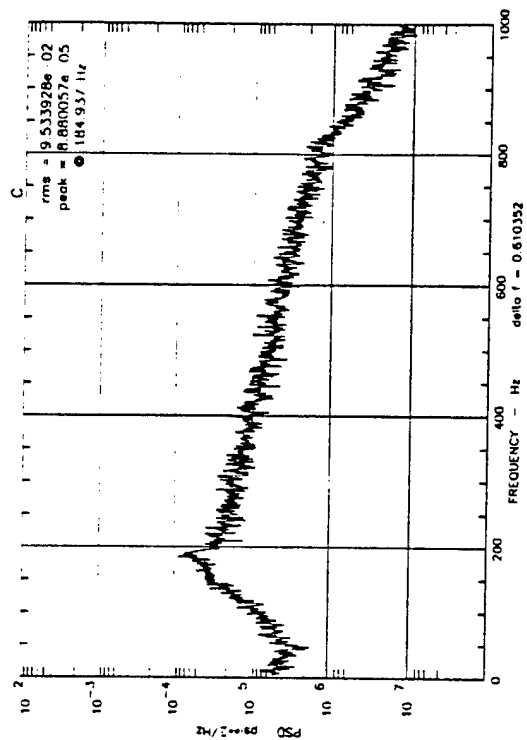
F 15 TPN 2961: alpha=28 beta=4 bp=65



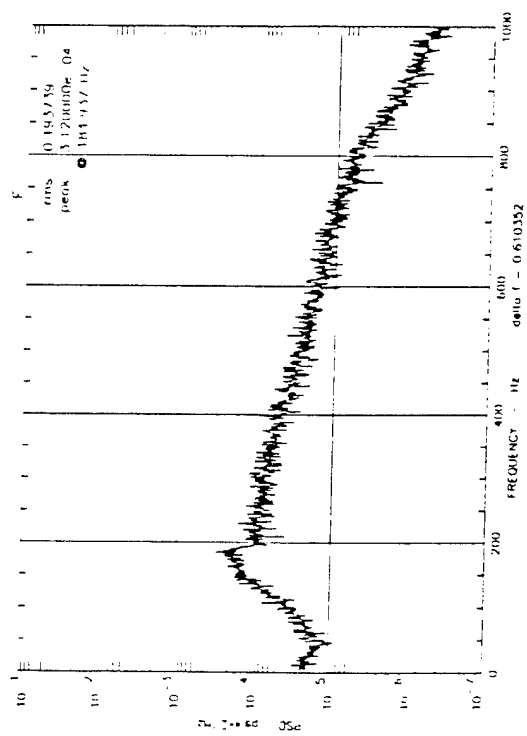
F 15 TPN 2961: alpha=28 beta=4 bp=65



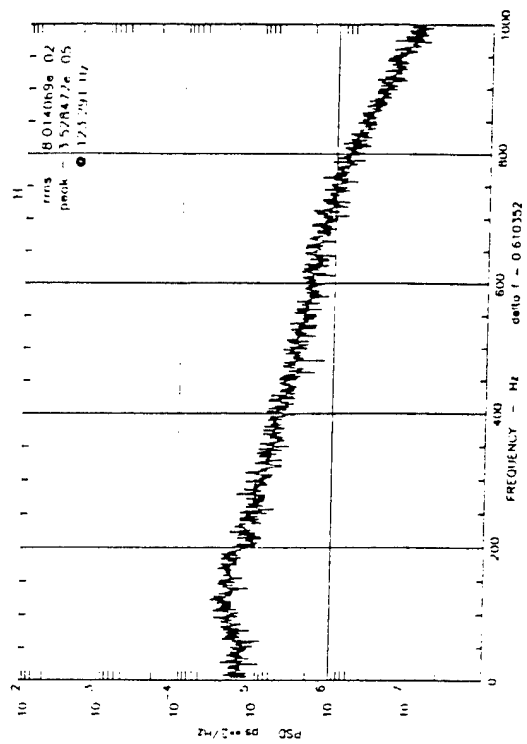
F 15 TPN 2961: alpha=28 beta=4 bp=65



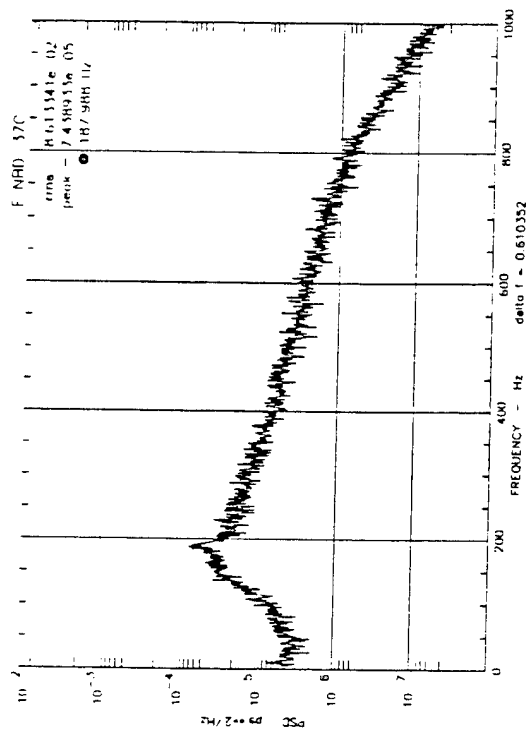
F 15 IPN 2961: alpha=28 beta=4 bp=65



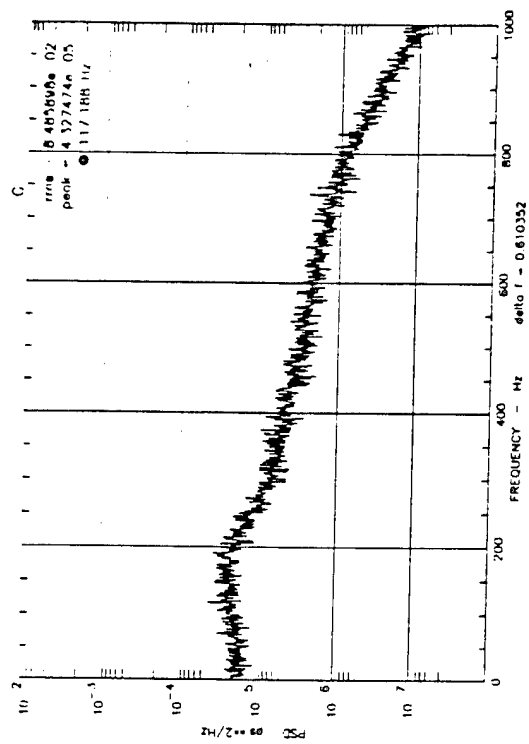
F 15 IPN 2961: alpha=28 beta=4 bp=65



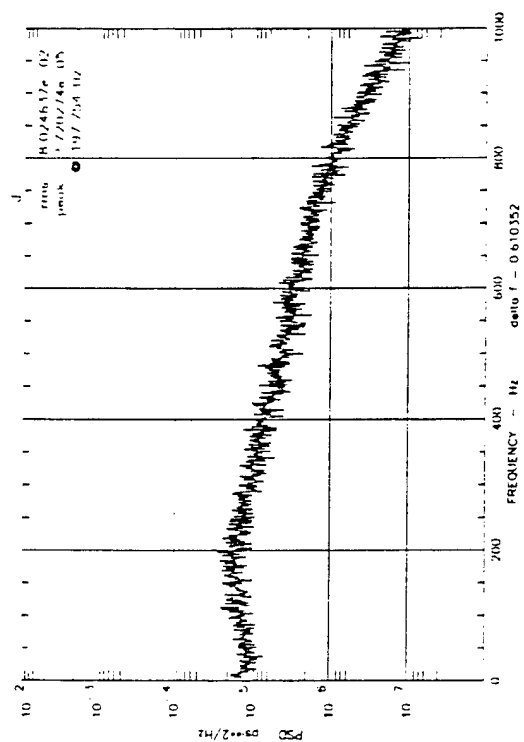
F 15 IPN 2961: alpha=28 beta=4 bp=65



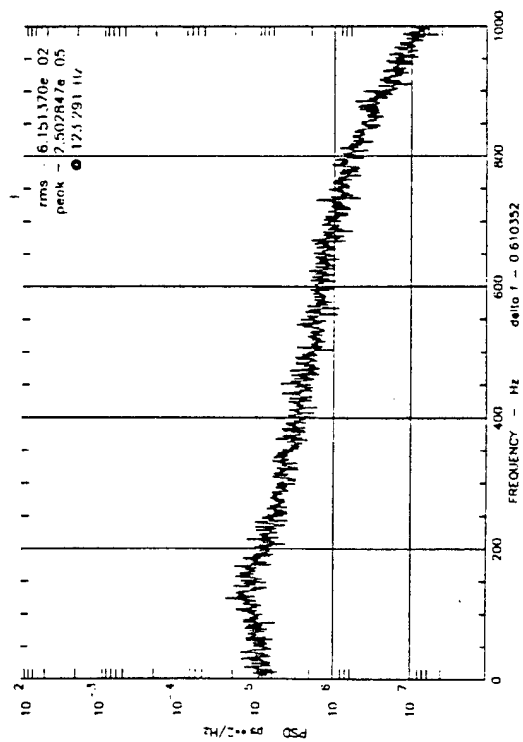
F 15 IPN 2961: alpha=28 beta=4 bp=65



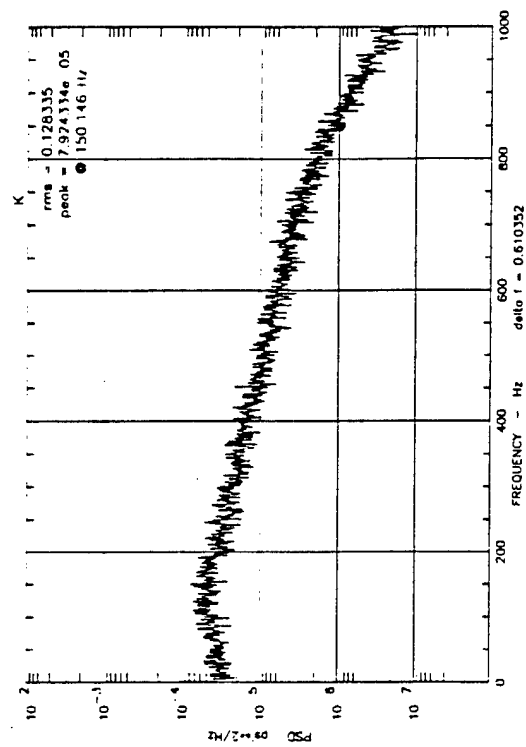
F 15 TPN 2961: alpha=28 beta=4 bp=65



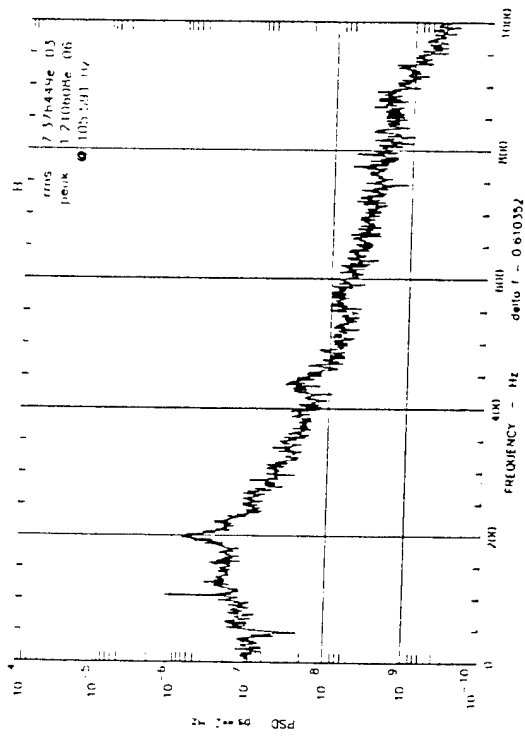
F 15 TPN 2961: alpha=28 beta=4 bp=65



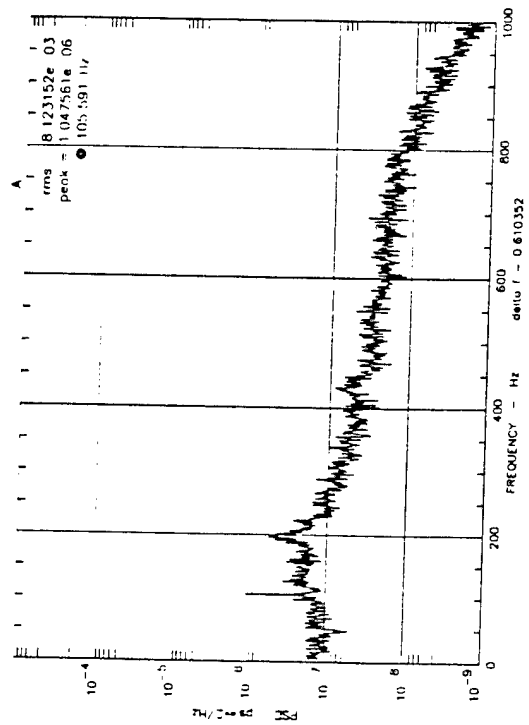
F 15 TPN 2961: alpha=28 beta=4 bp=65



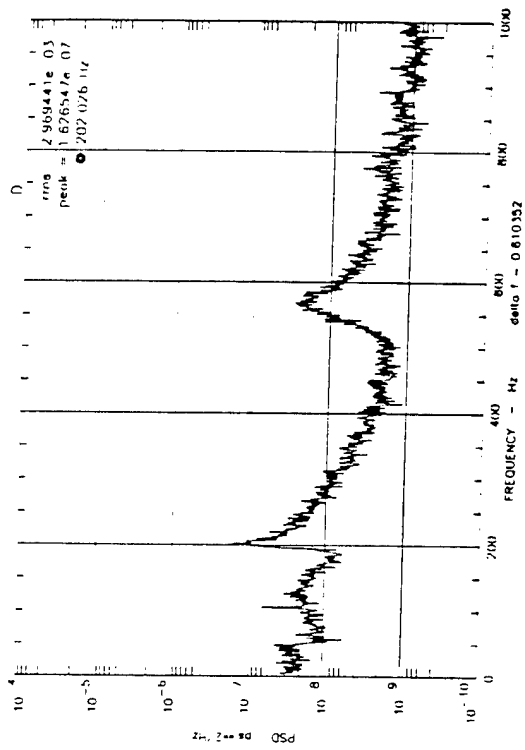
F 1.5 TPN 3038; alpha=16 beta=0 bp=65



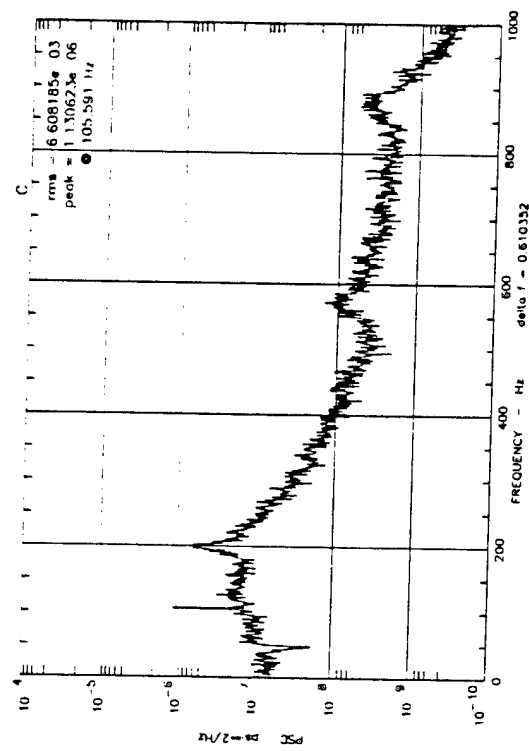
F 1.5 TPN 3038; alpha=16 beta=0 bp=65



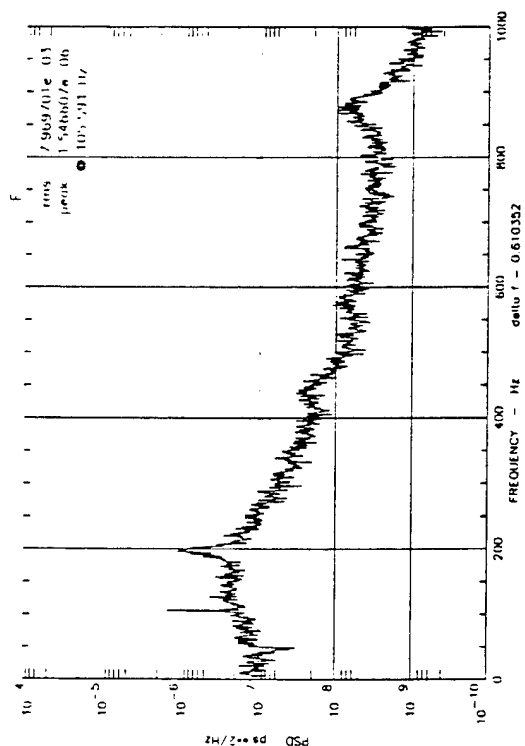
F 1.5 TPN 3038; alpha=16 beta=0 bp=65



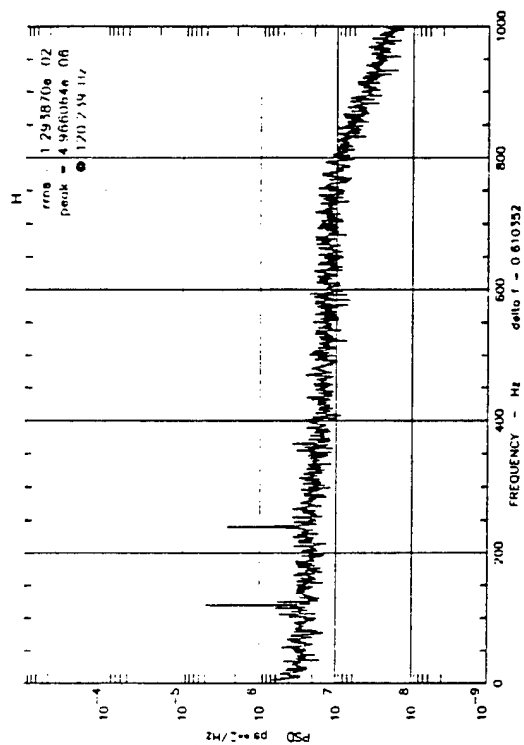
F 1.5 TPN 3038; alpha=16 beta=0 bp=65



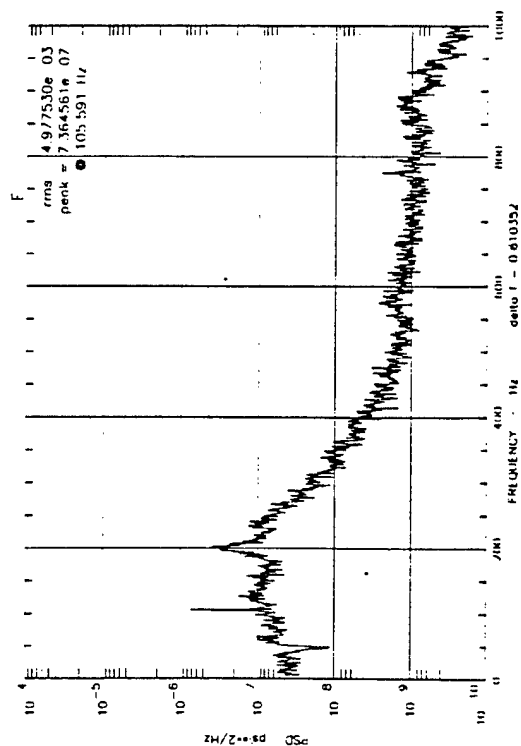
F 15 TPN 3038: alpha=16 beta=0 bp=65



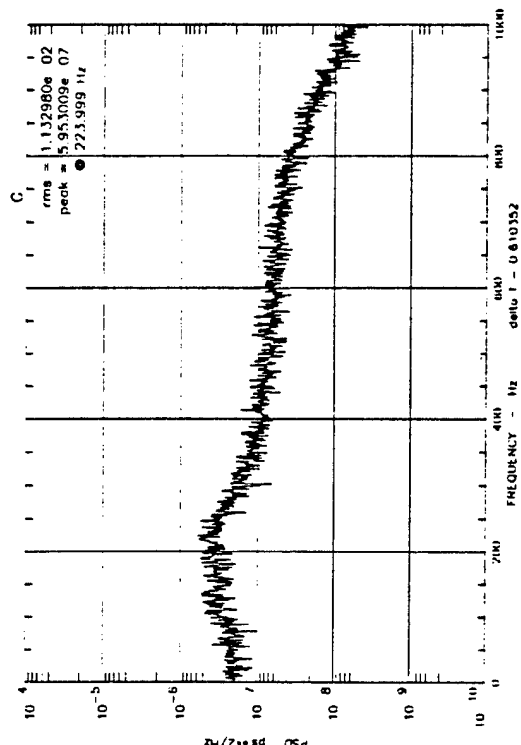
F 15 TPN 3038: alpha=16 beta=0 bp=65



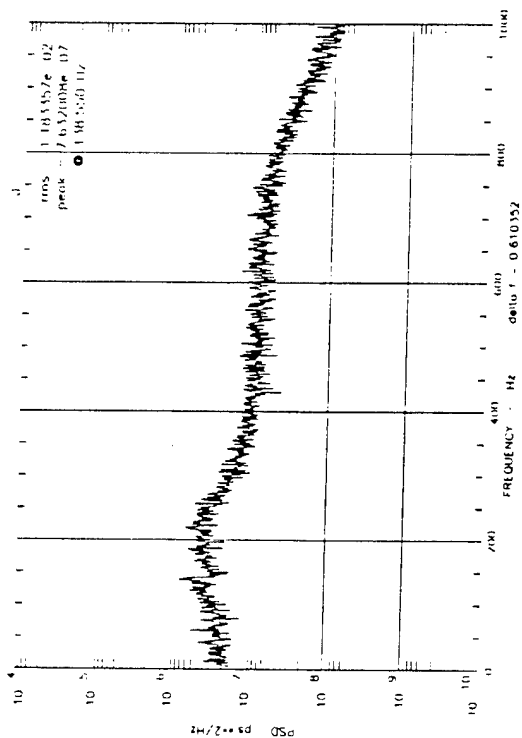
F 15 TPN 3038: alpha=16 beta=0 bp=65



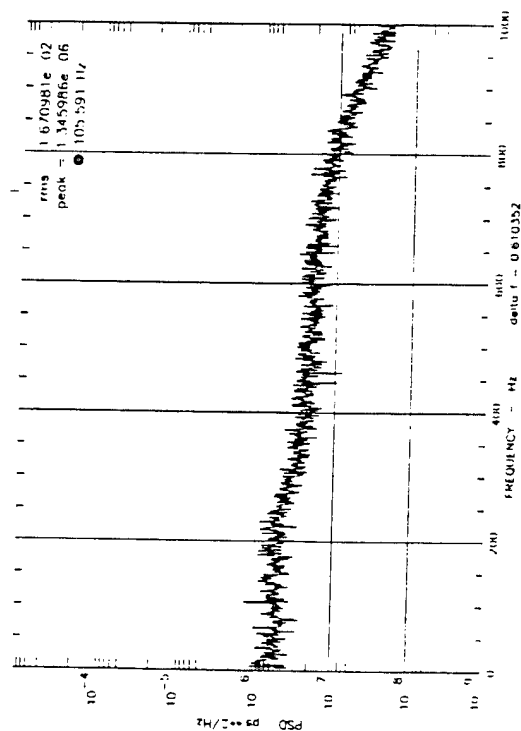
F 15 TPN 3038: alpha=16 beta=0 bp=65



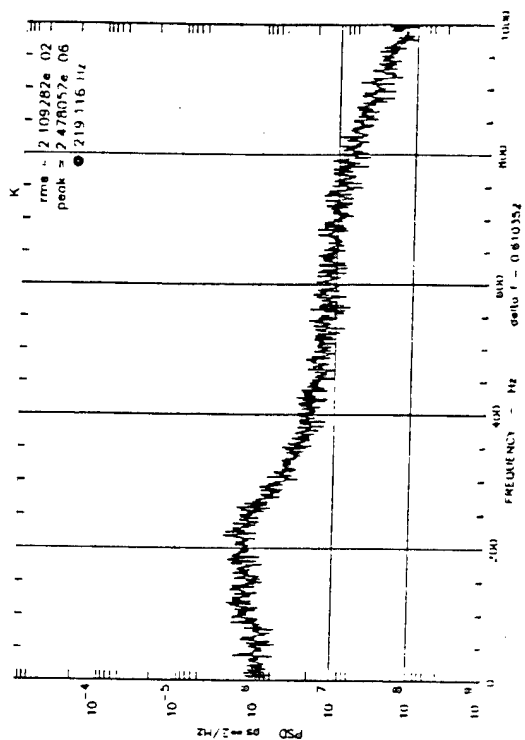
F 15 TPN 3038; alpha-16 beta-0 bp-65



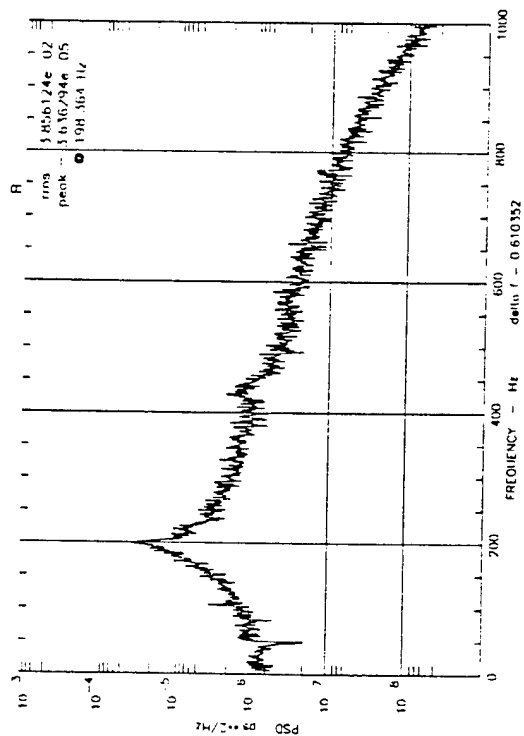
F 15 TPN 3038; alpha-16 beta-0 bp-65



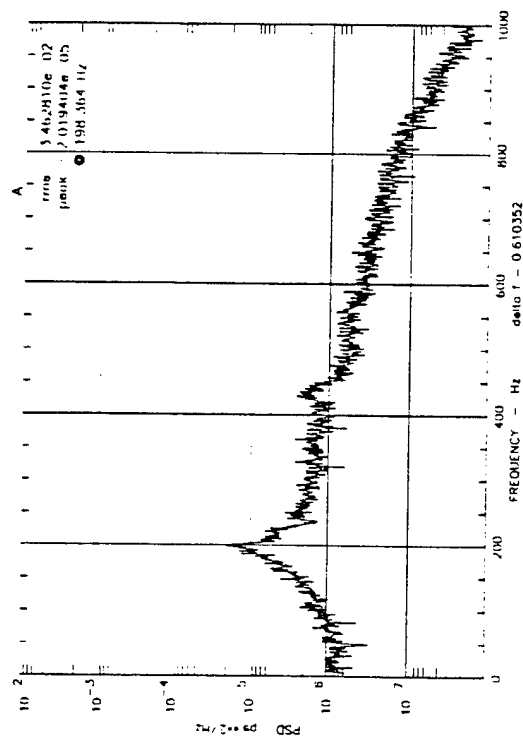
F 15 TPN 3038; alpha-16 beta-0 bp-65



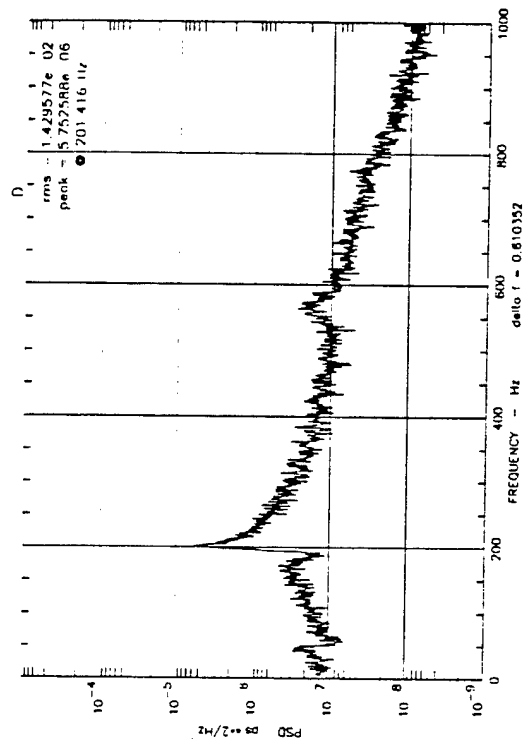
F 15 TPN 3040: alpha=20 beta=0 bp=65



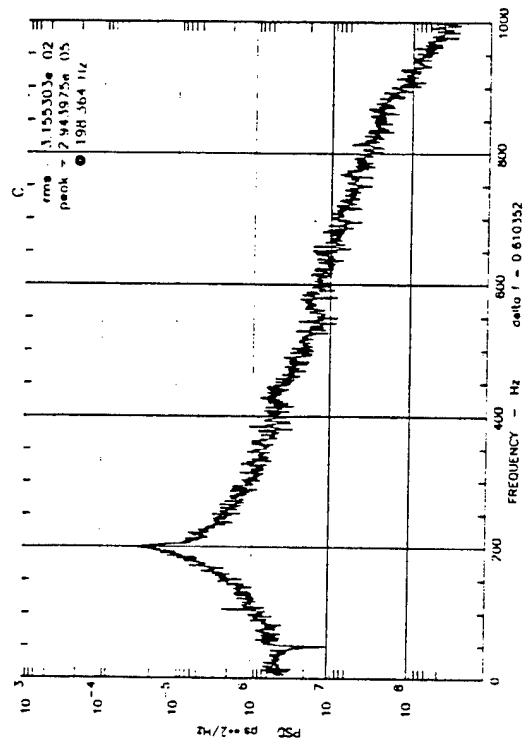
F 15 TPN 3040: alpha=20 beta=0 bp=65



F 15 TPN 3040: alpha=20 beta=0 bp=65

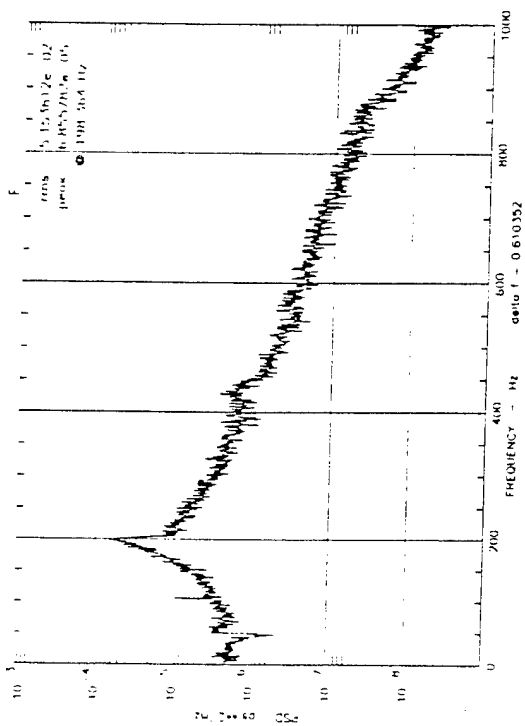


F 15 TPN 3040: alpha=20 beta=0 bp=65

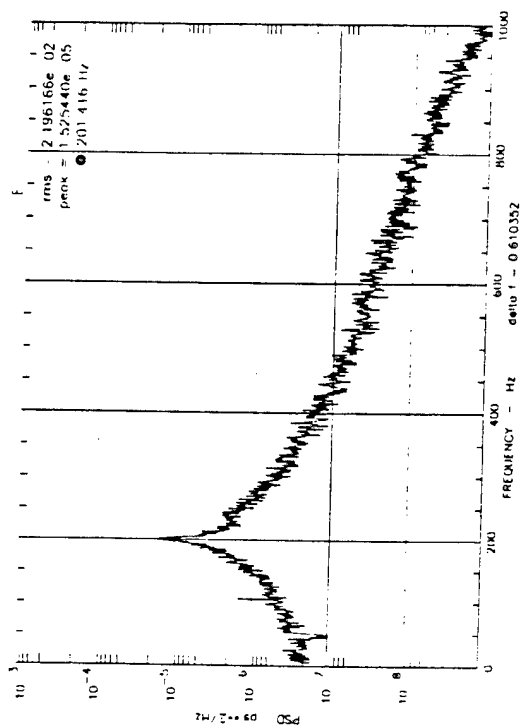




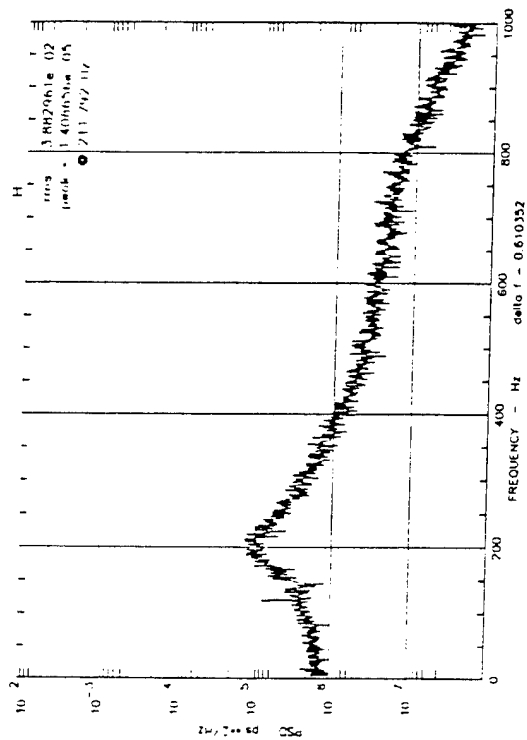
F 15 IPN 3040, alpha=20 beta=0 bp=65



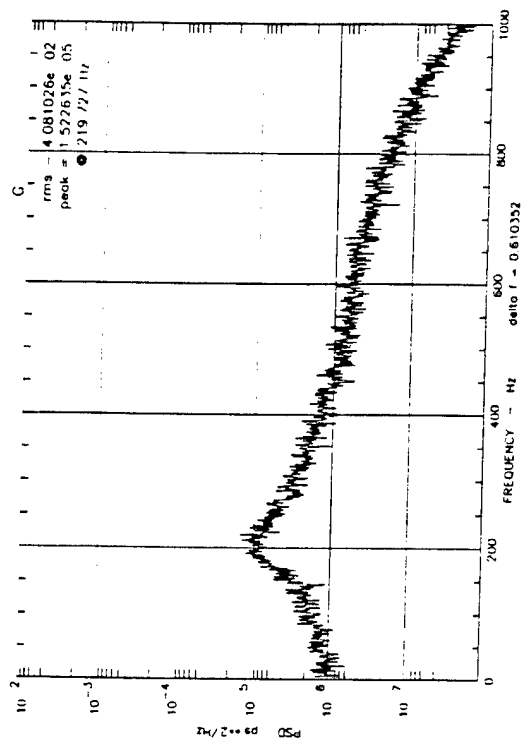
F 15 IPN 3040, alpha=20 beta=0 bp=65



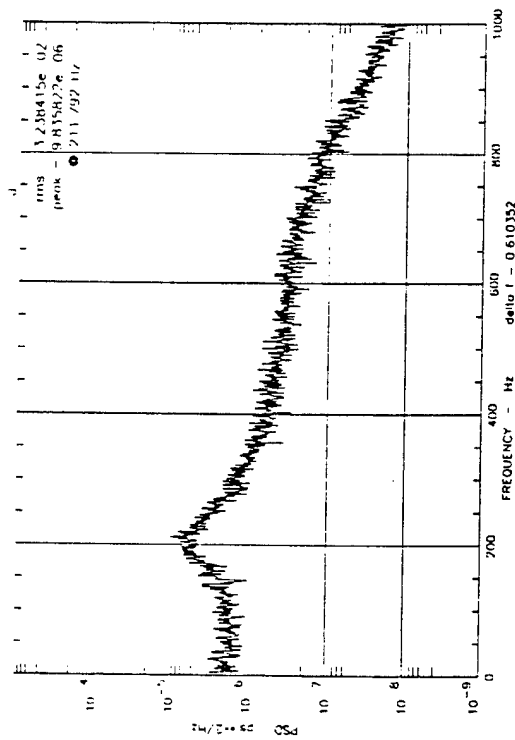
F 15 IPN 3040, alpha=20 beta=0 bp=65



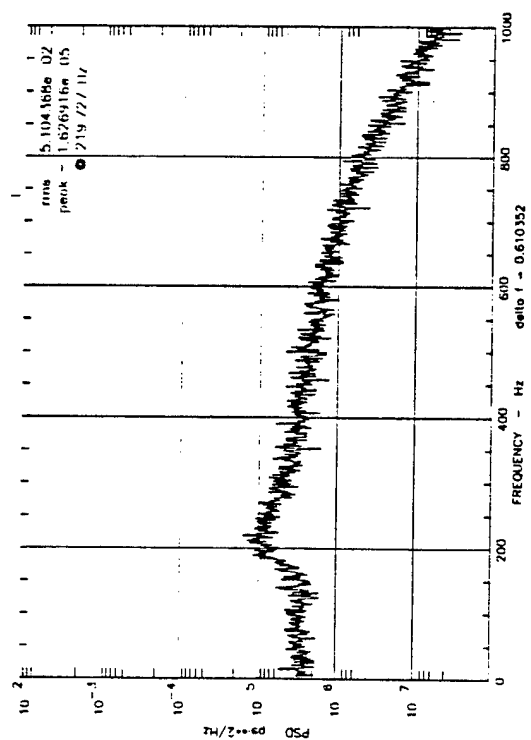
F 15 IPN 3040, alpha=20 beta=0 bp=65



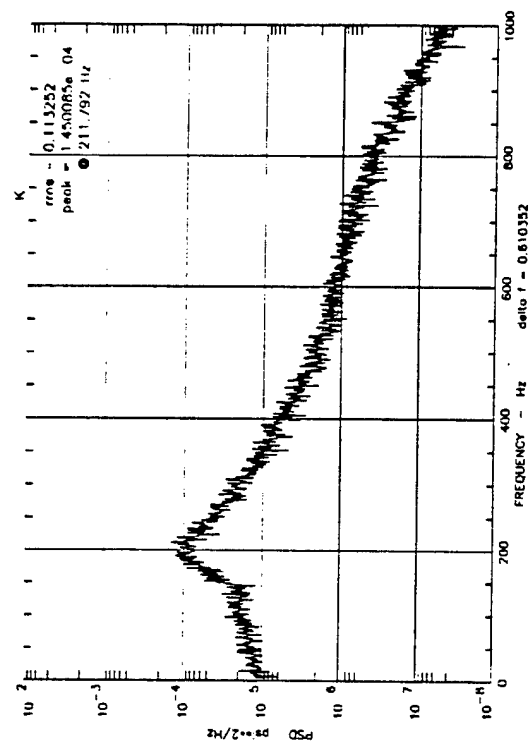
F 15 TPN 3040: alpha=20 beta=0 bp=65



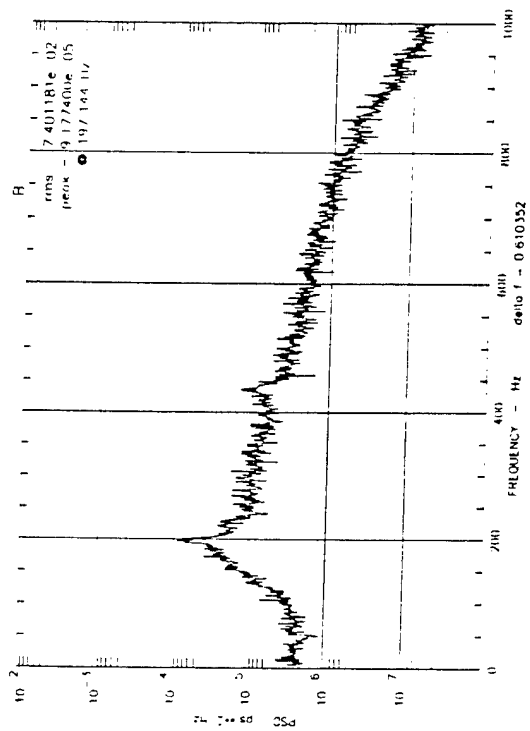
F 15 TPN 3040: alpha=20 beta=0 bp=65



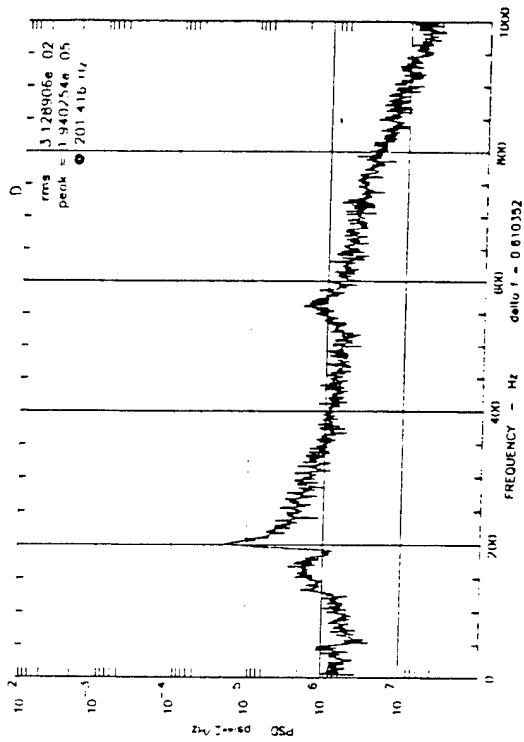
F 15 TPN 3040: alpha=20 beta=0 bp=65



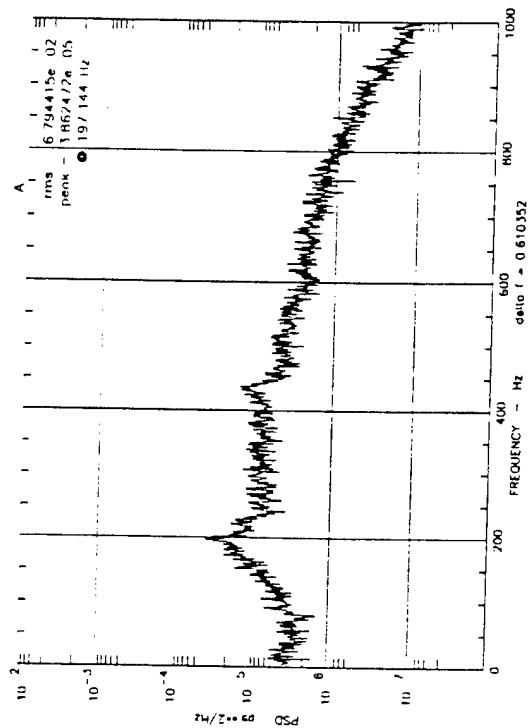
F 15 IPN 3042: alpha=24 beta=0 bp=65



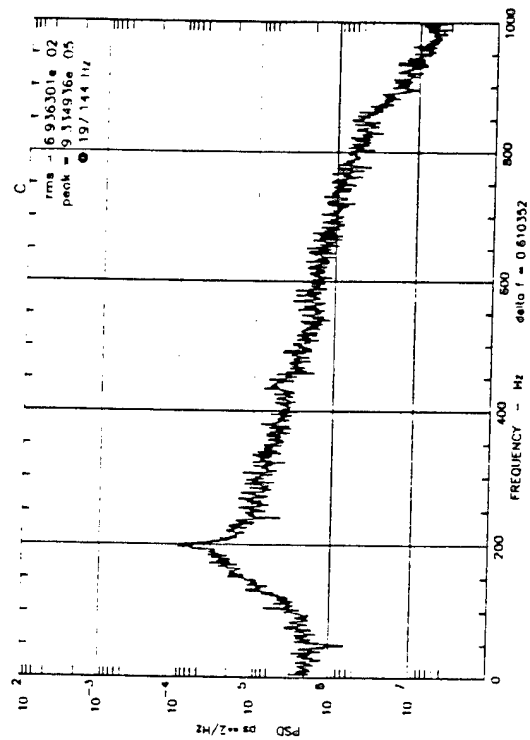
F 15 IPN 3042: alpha=24 beta=0 bp=65



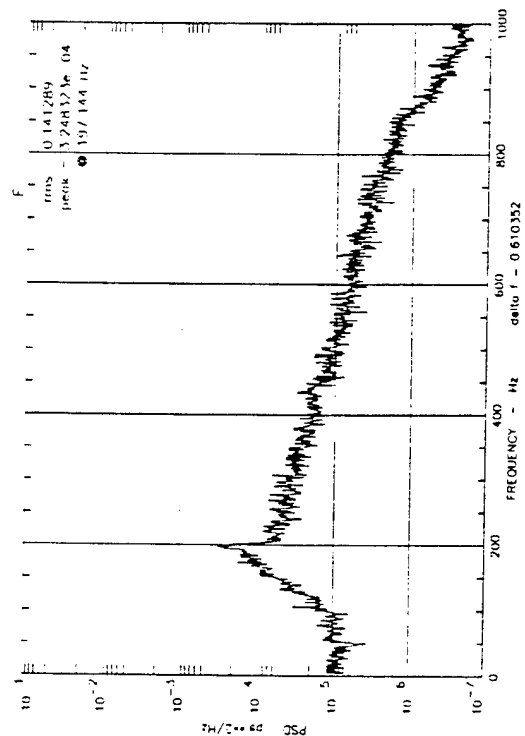
F 15 IPN 3042: alpha=24 beta=0 bp=65



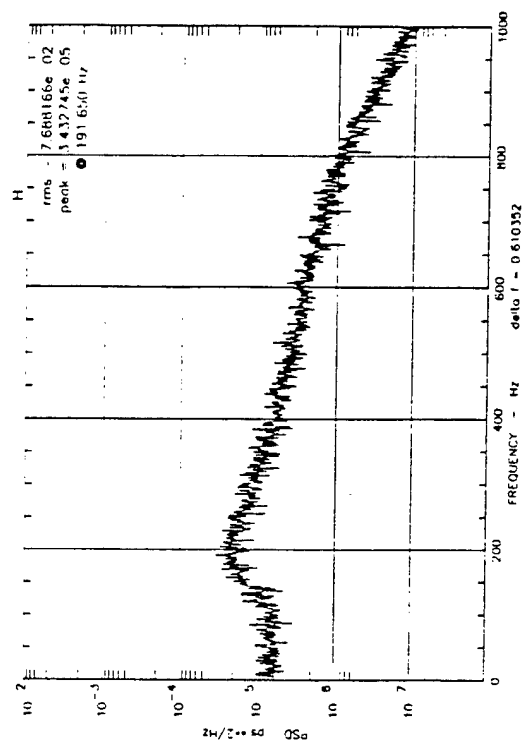
F 15 IPN 3042: alpha=24 beta=0 bp=65



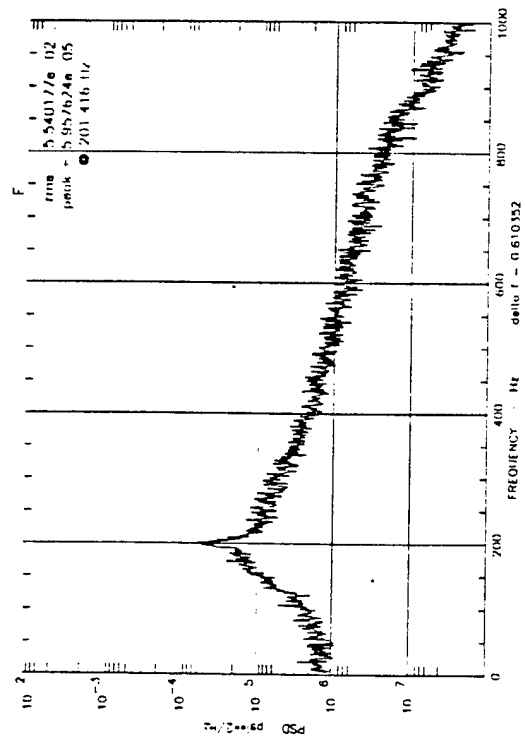
F 15 TPN 3042: alpha=24 beta=0 bp=65



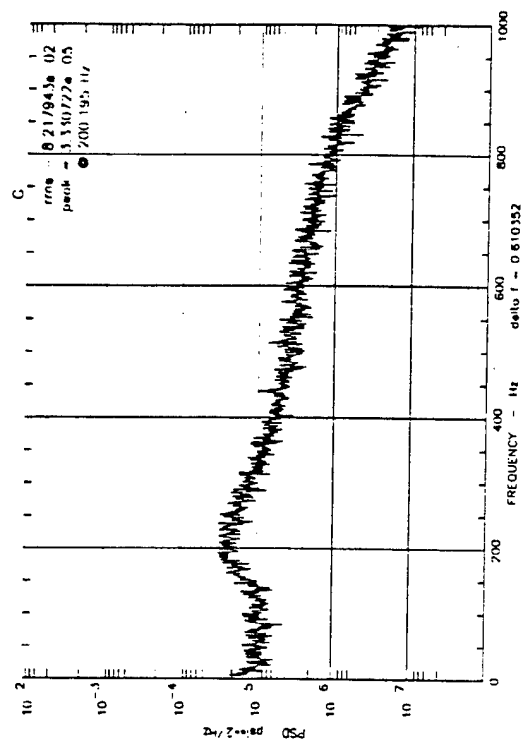
F 15 TPN 3042: alpha=24 beta=0 bp=65



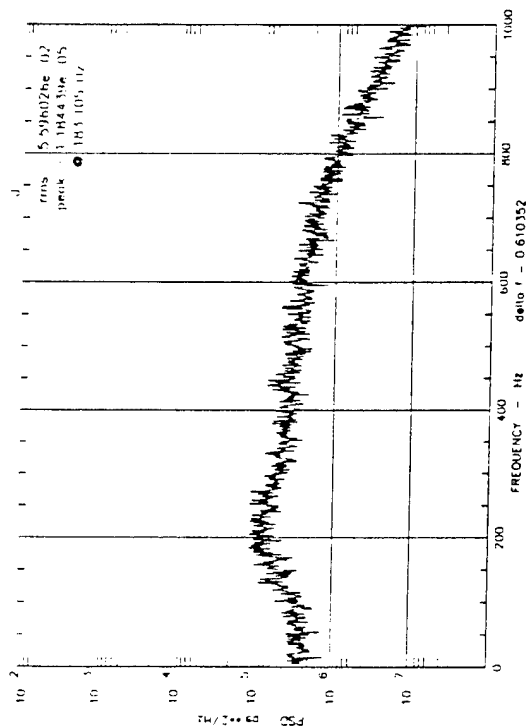
F 15 TPN 3042: alpha=24 beta=0 bp=65



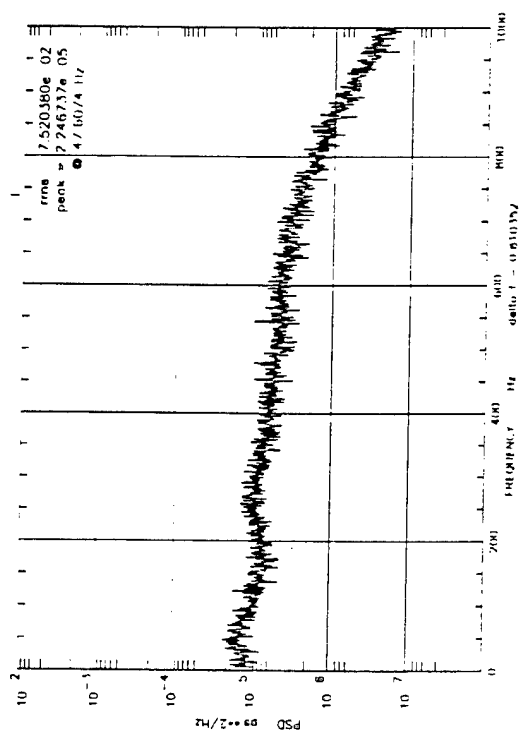
F 15 TPN 3042: alpha=24 beta=0 bp=65



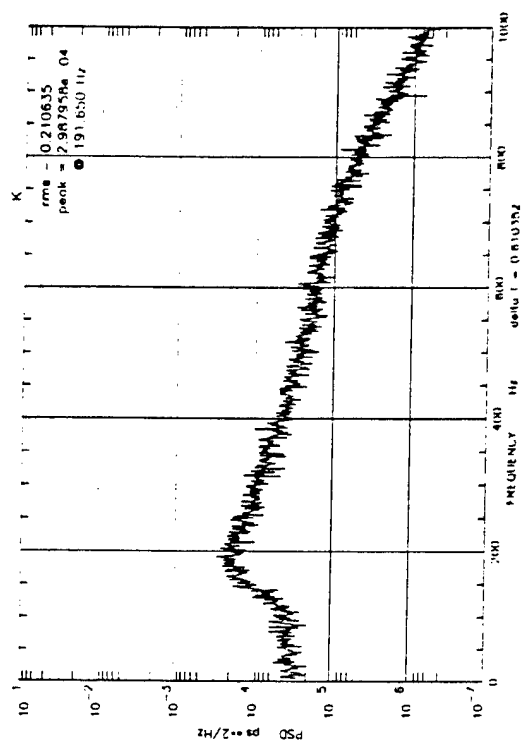
F 15 TPN 3042: alpha-24 beta-0 bp-65



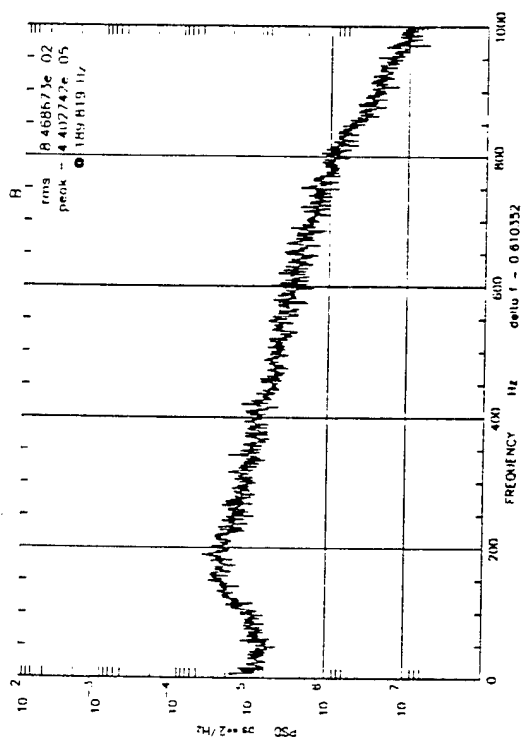
F 15 TPN 3042: alpha-24 beta-0 bp-65



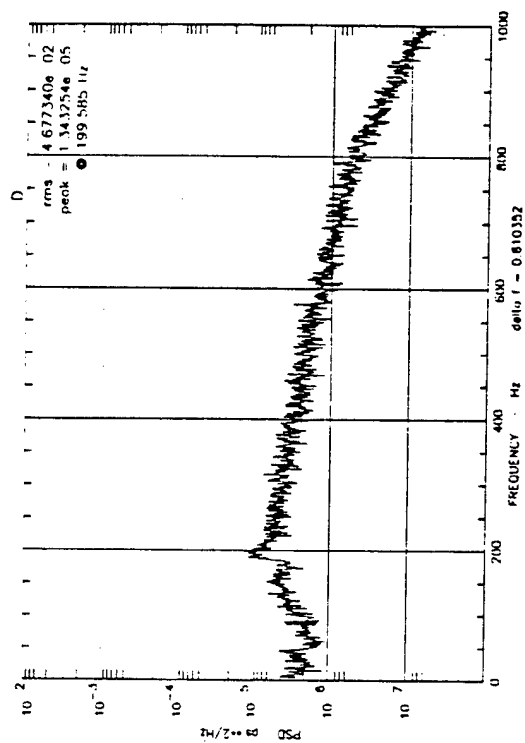
F 15 TPN 3042: alpha-24 beta-0 bp-65



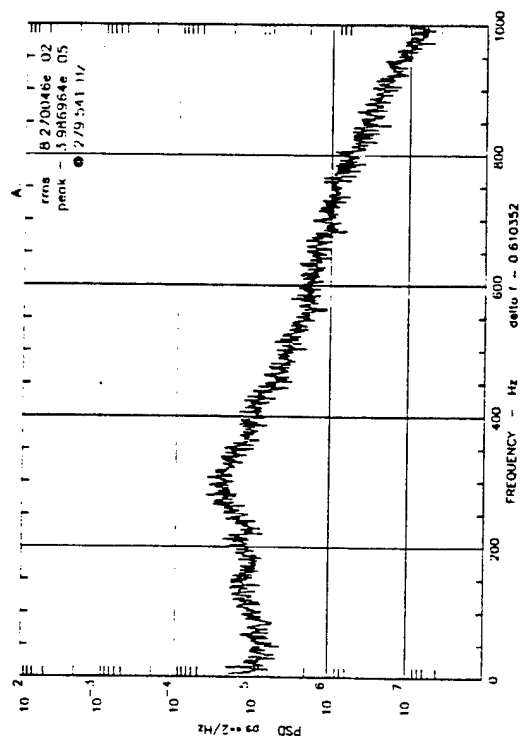
F 15 TPN 2959; alpha=28 beta=0 bp=65



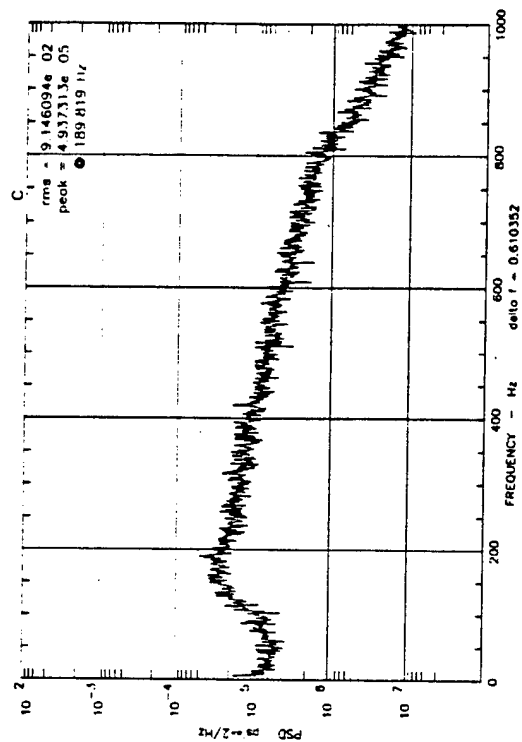
F 15 TPN 2959; alpha=28 beta=0 bp=65



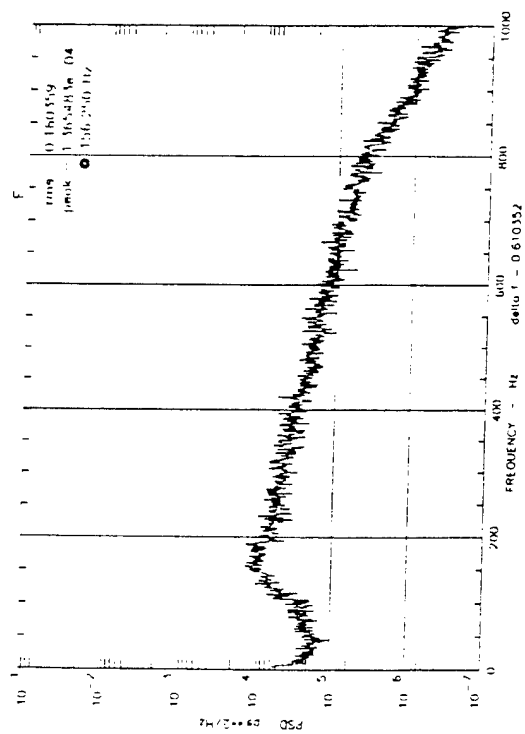
F 15 TPN 2959; alpha=28 beta=0 bp=65



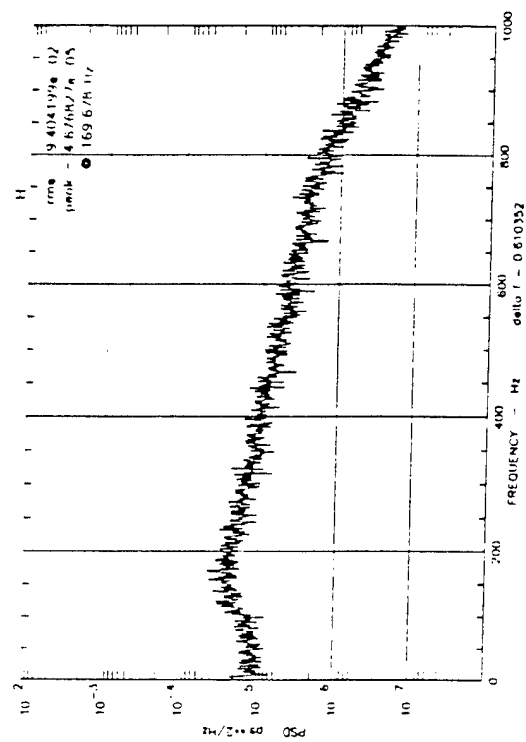
F 15 TPN 2959; alpha=28 beta=0 bp=65



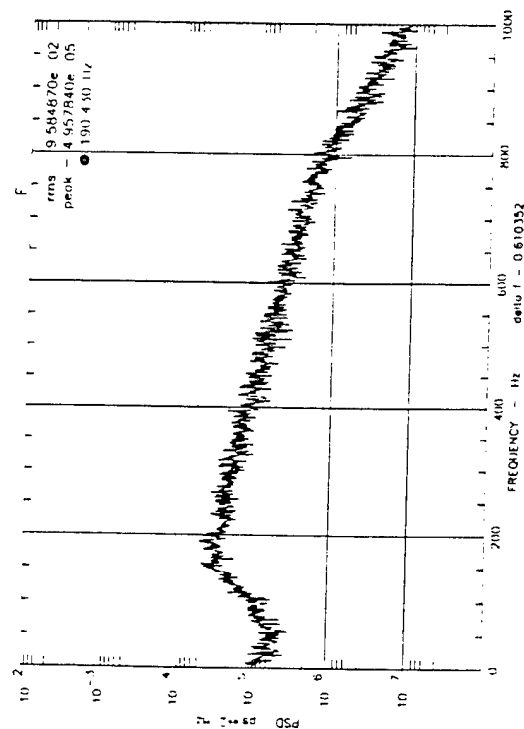
F 15 IPN 2959, alpha-28 beta-0 bp-65



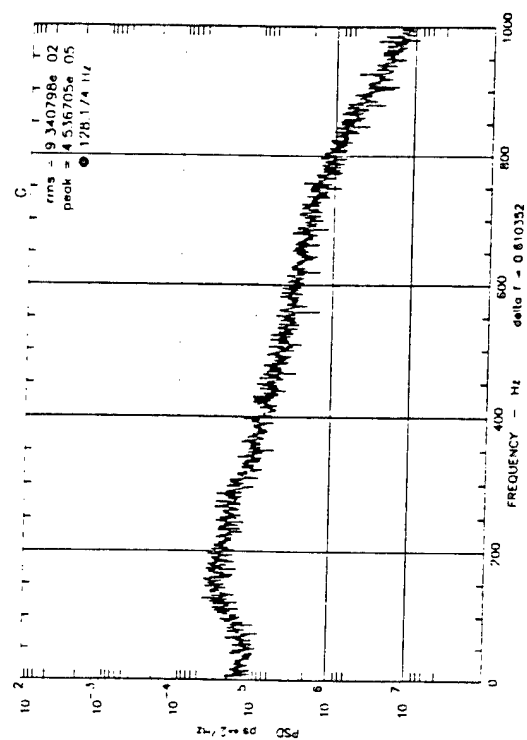
F 15 IPN 2959, alpha-28 beta-0 bp-65



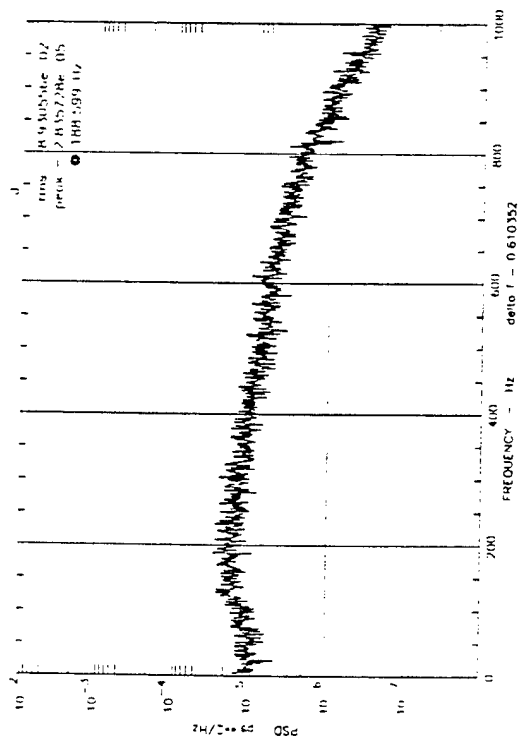
F 15 IPN 2959, alpha-28 beta-0 bp-65



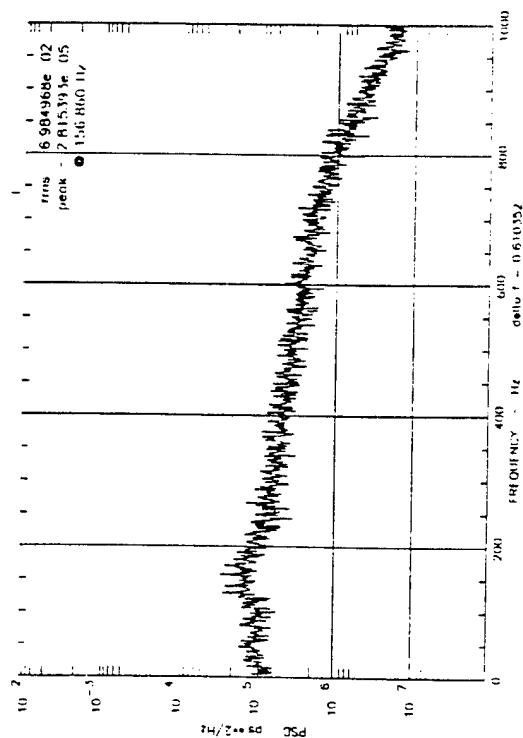
F 15 IPN 2959, alpha-28 beta-0 bp-65



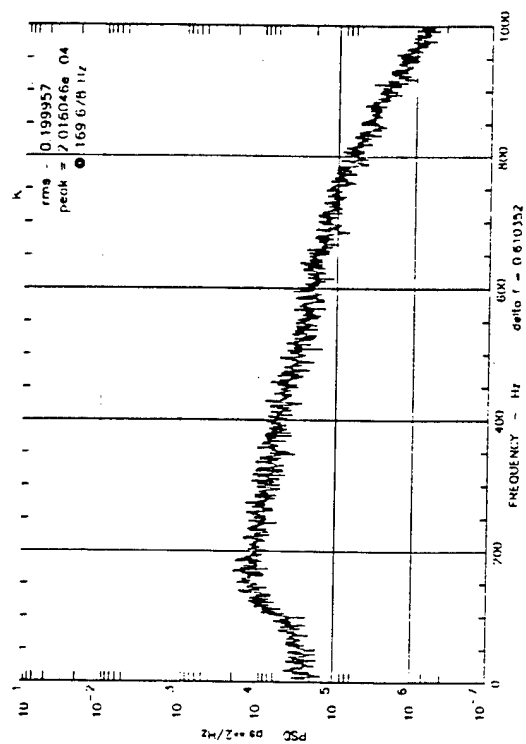
F 15 TPN 2959: alpha-28 beta-0 bp-65



F 15 TPN 2959: alpha-28 beta-0 bp-65

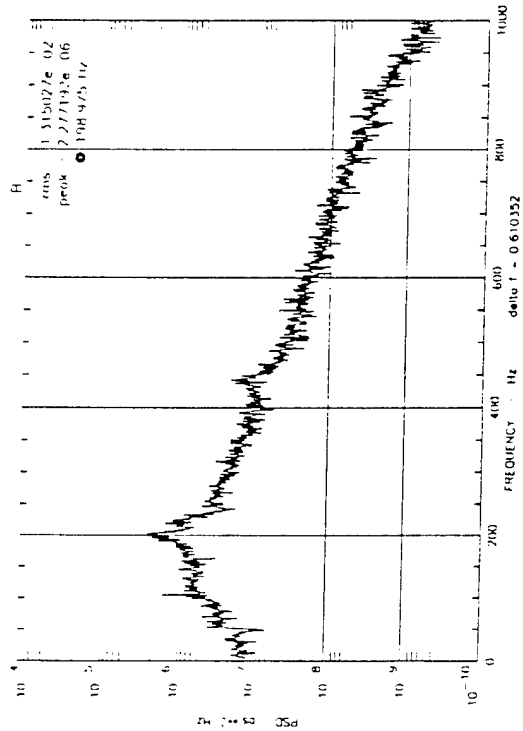


F 15 TPN 2959: alpha-28 beta-0 bp-65

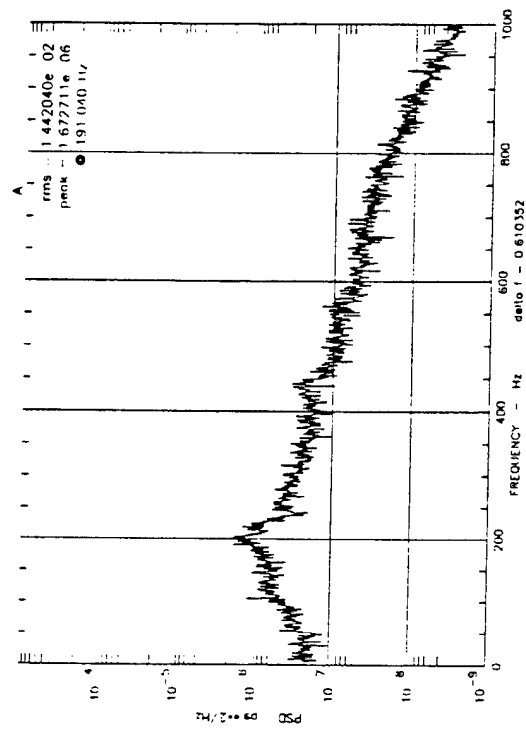




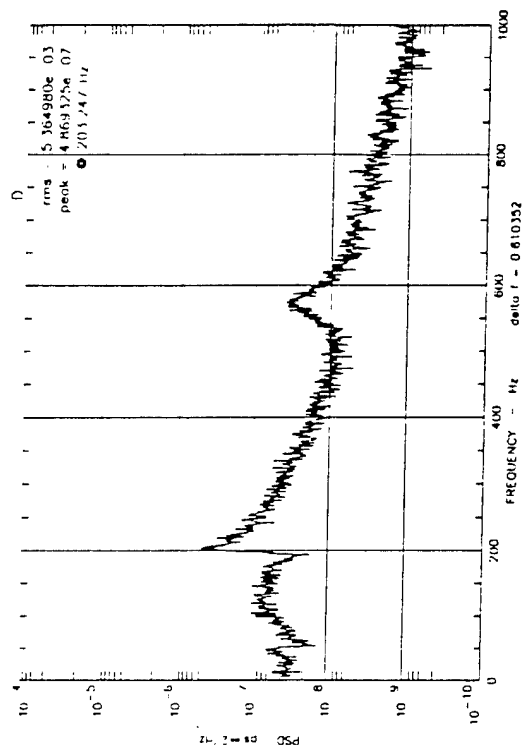
F 15 TPN 3032: alpha=16 beta= 4 bp=65



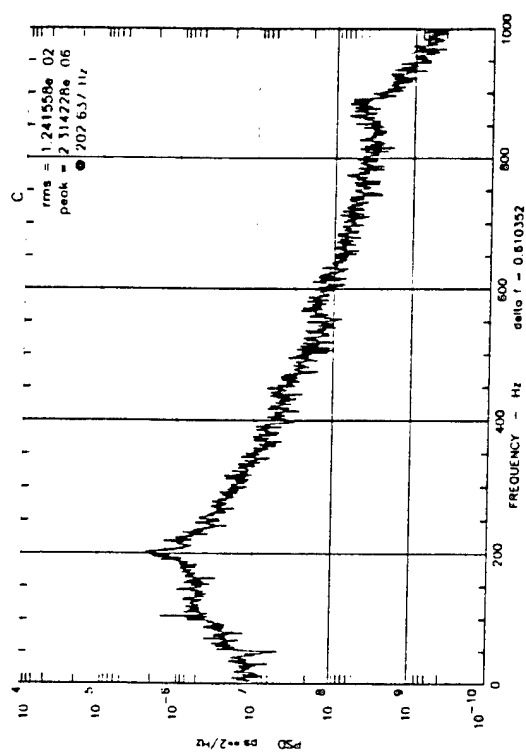
F 15 TPN 3032: alpha=16 beta= 4 bp=65



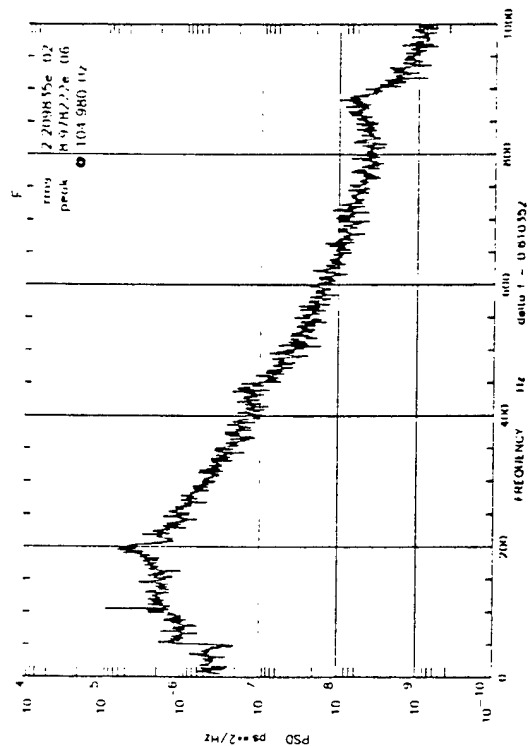
F 15 TPN 3032: alpha=16 beta= 4 bp=65



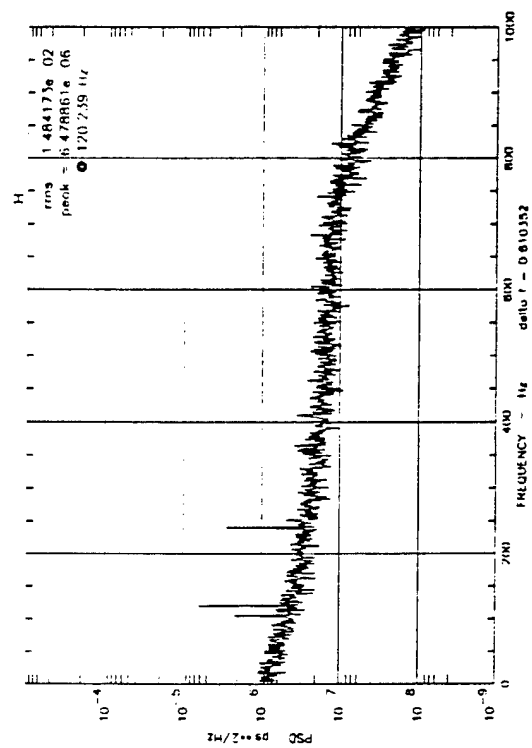
F 15 TPN 3032: alpha=16 beta= 4 bp=65



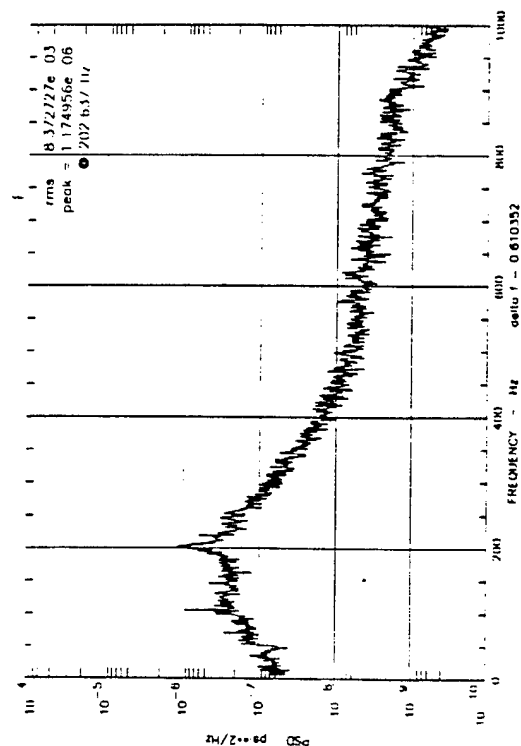
F 15 TPN 30.32: alpha=16 beta= 4 bp=65



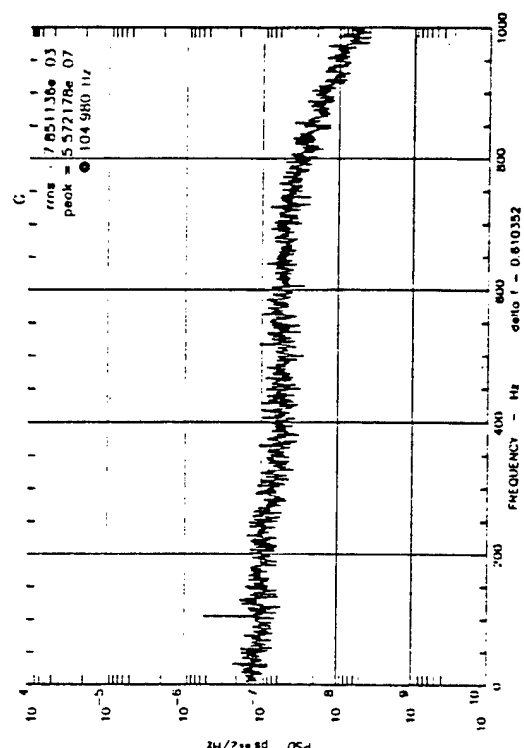
F 15 TPN 30.32: alpha=16 beta= 4 bp=65

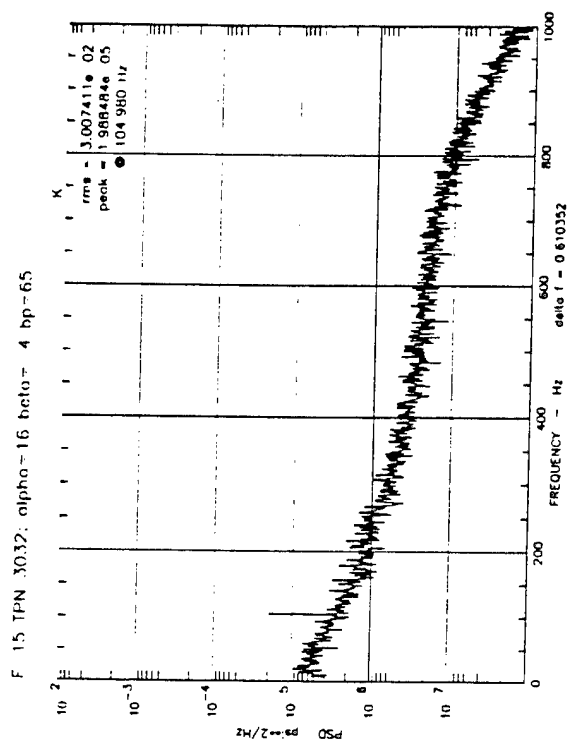
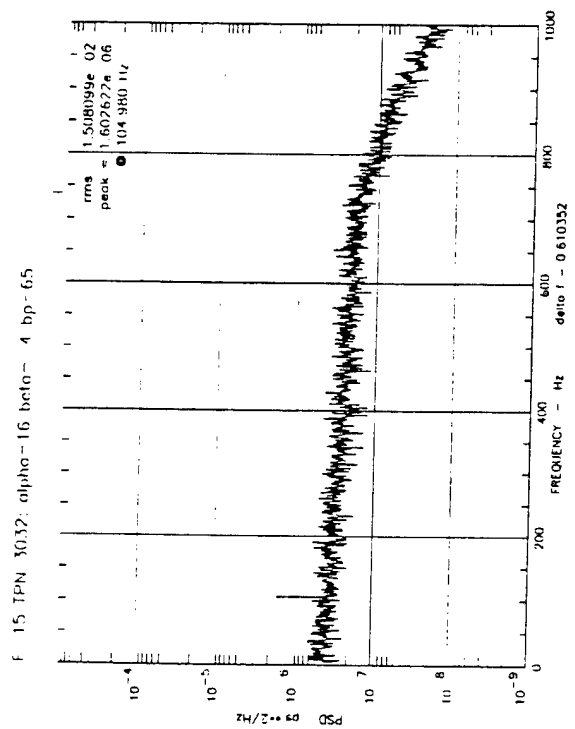
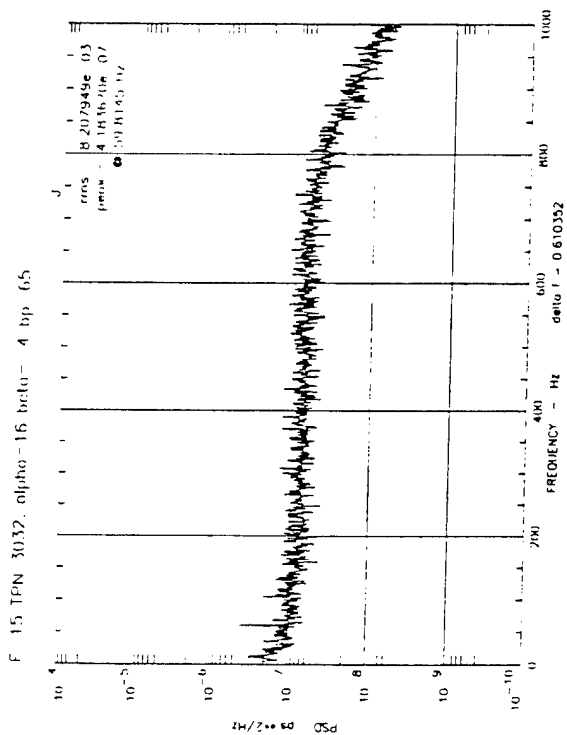


F 15 TPN 30.32: alpha=16 beta= 4 bp=65

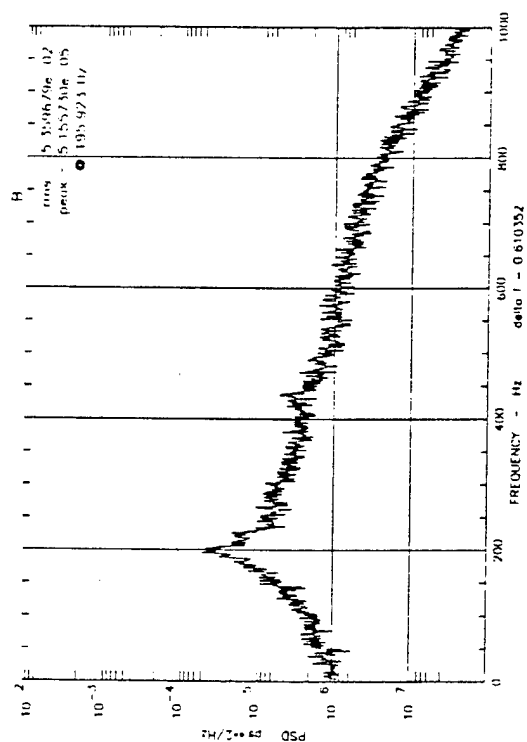


F 15 TPN 30.32: alpha=16 beta= 4 bp=65

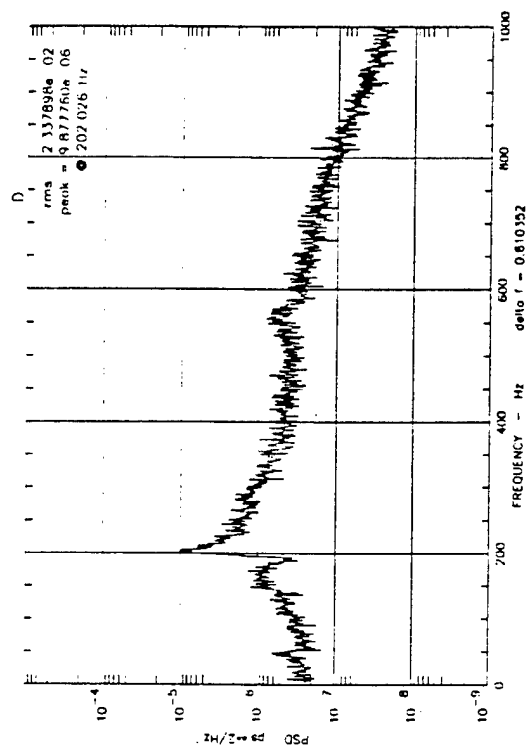




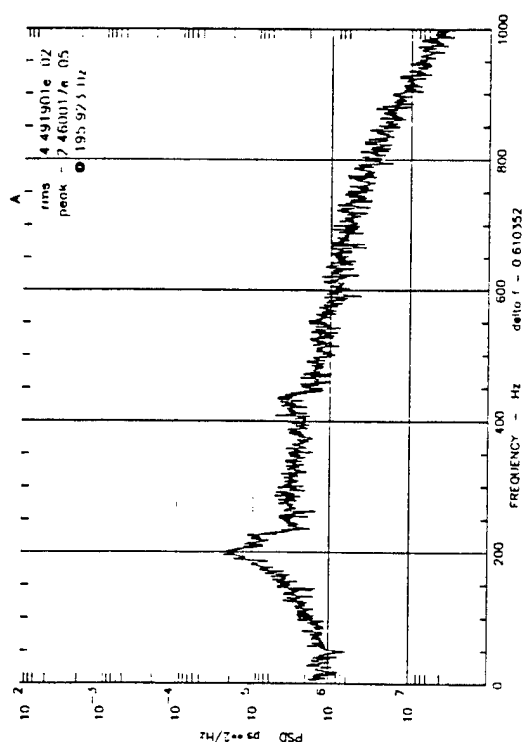
F 15 TPN 3034: alpha=20 beta= 4 bp 65



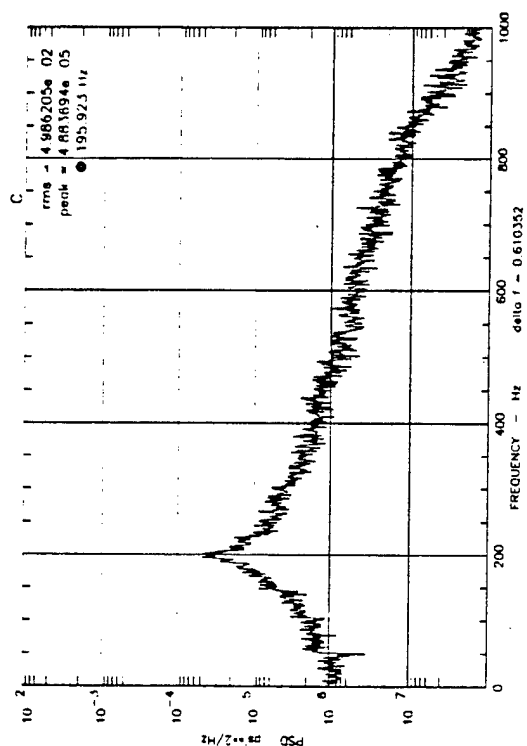
F 15 TPN 3034: alpha=20 beta= 4 bp-65



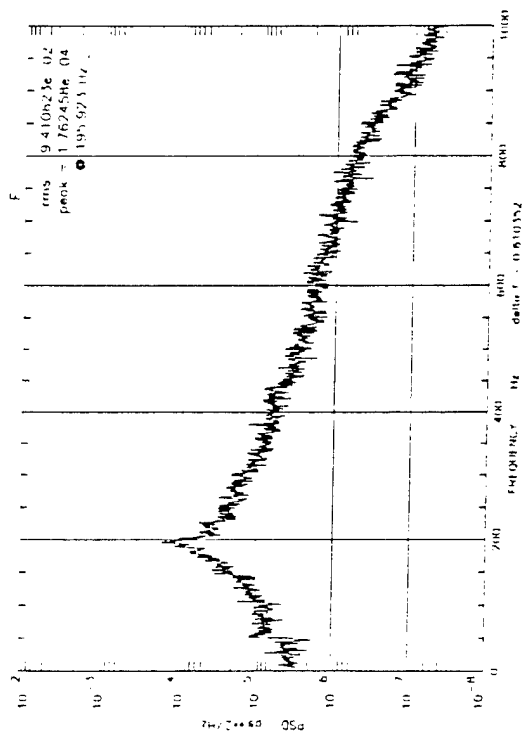
F 15 TPN 3034: alpha=20 beta= 4 bp-65



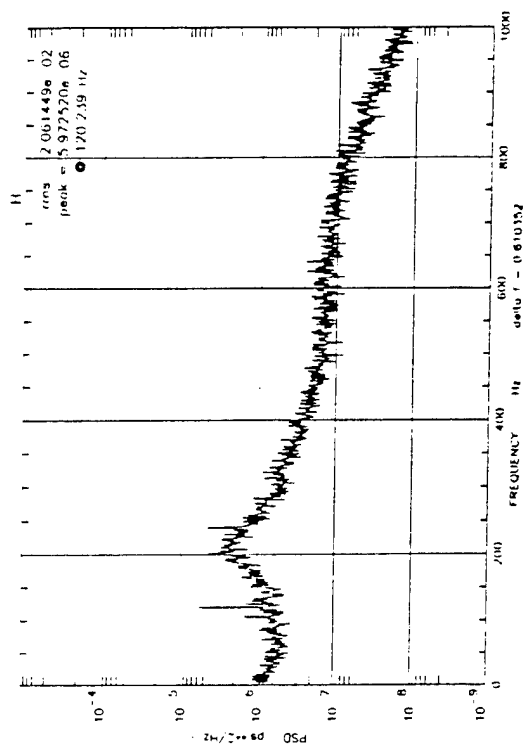
F 15 TPN 3034: alpha=20 beta= 4 bp=65



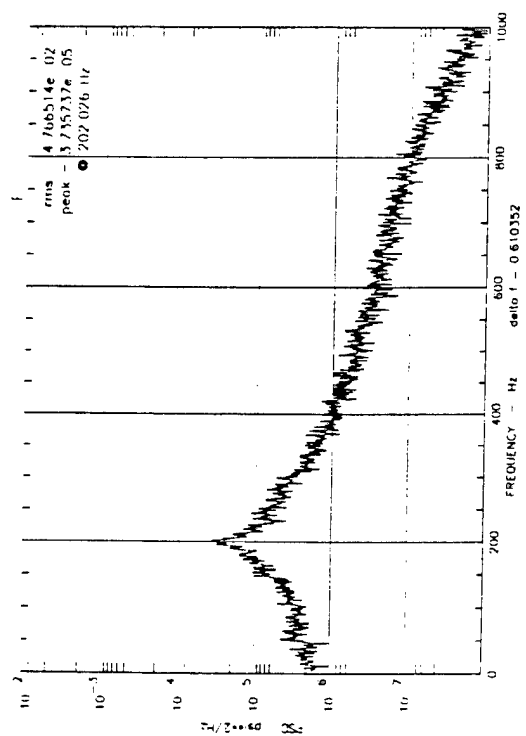
F 15 TPN 3034; alpha=20 beta= 4 bp=65



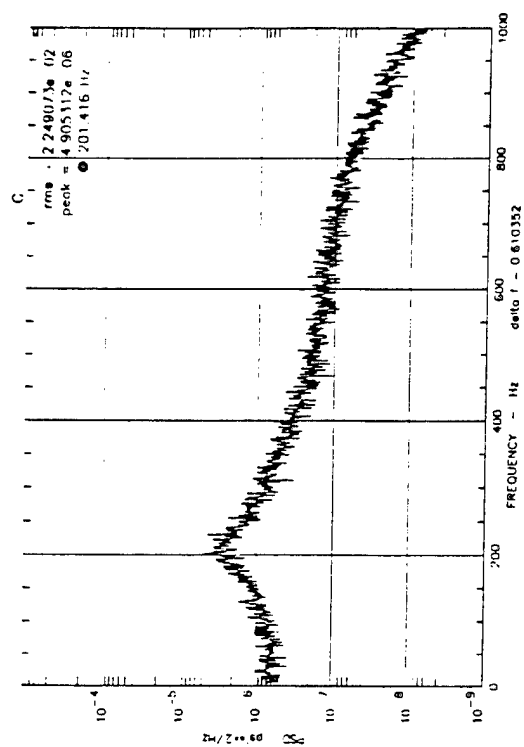
F 15 TPN 3034; alpha=20 beta= 4 bp=65

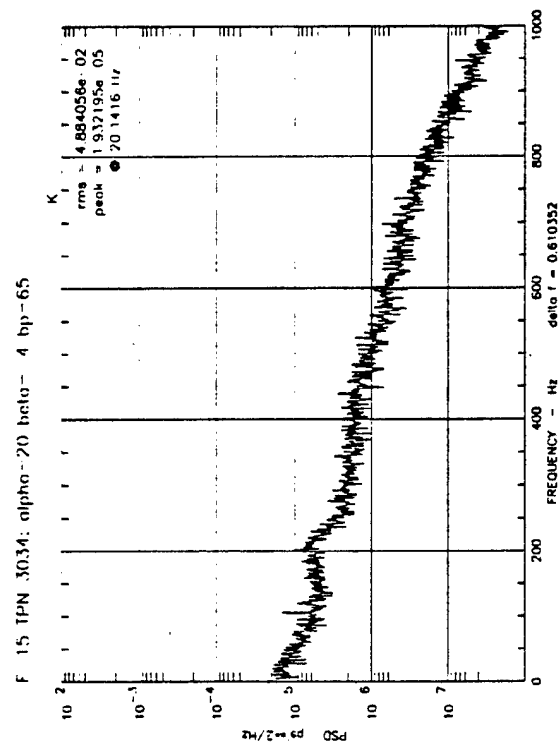
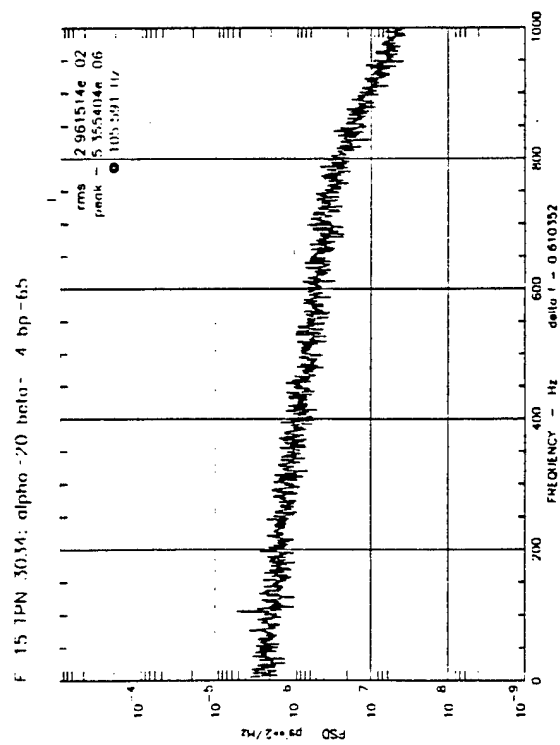
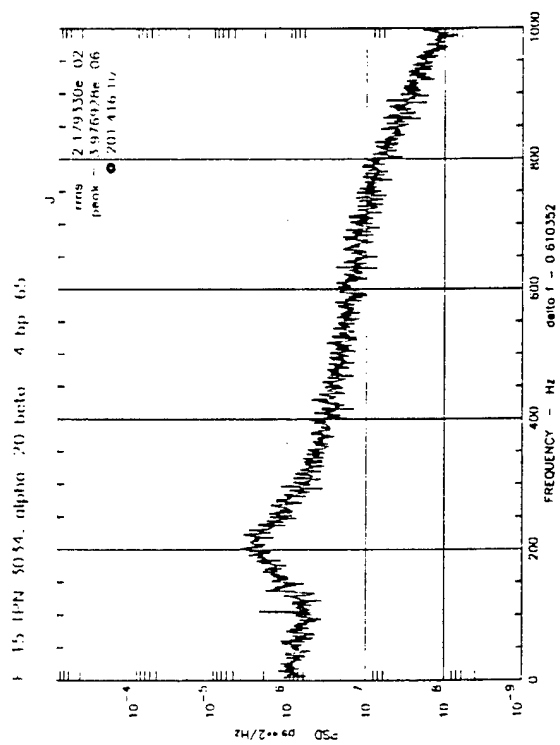


F 15 TPN 3034; alpha=20 beta= 4 bp=65

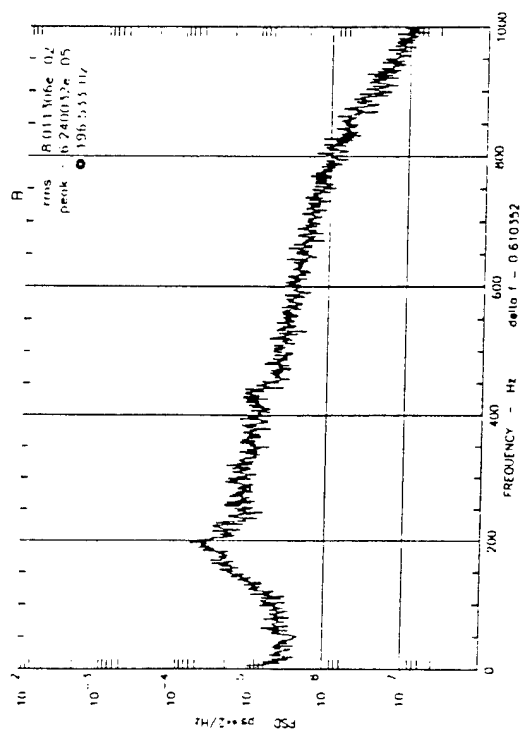


F 15 TPN 3034; alpha=20 beta= 4 bp=65

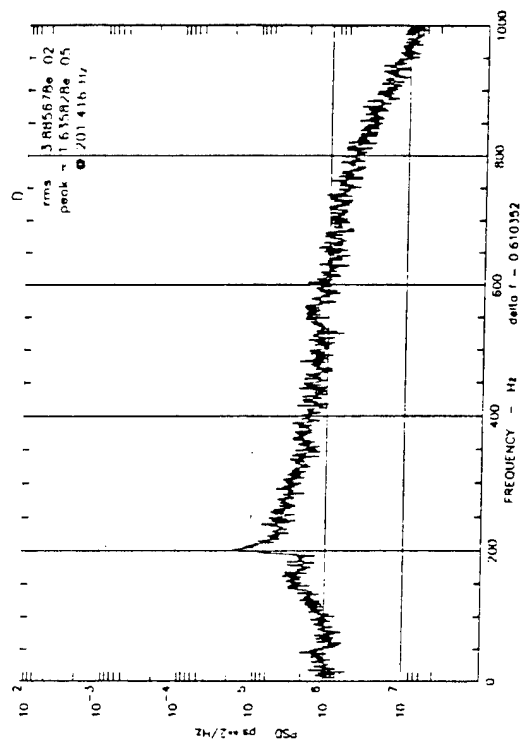




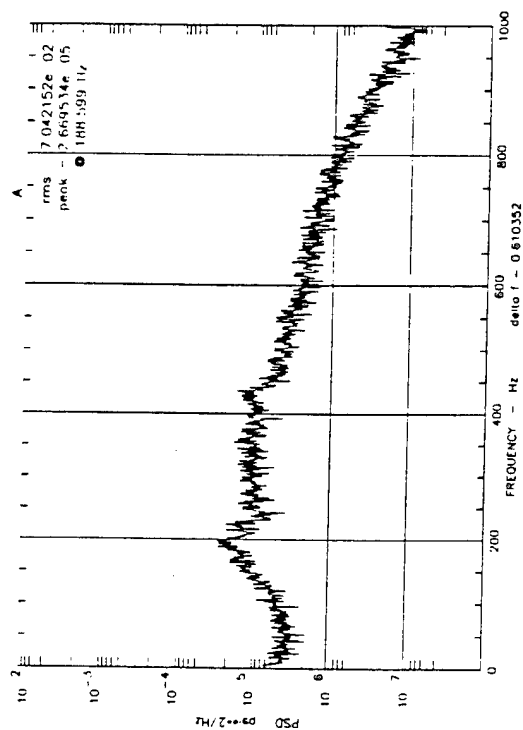
F 15 TPN 3036: alpha=24 beta= 4 bp=65



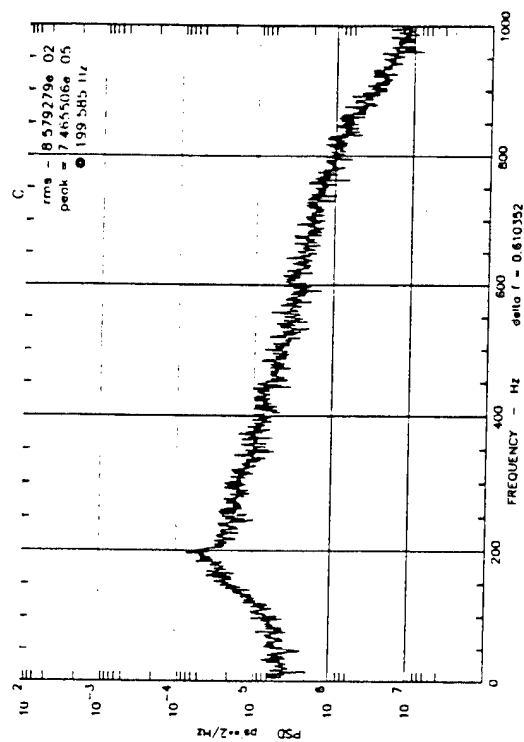
F 15 TPN 3036: alpha=24 beta= 4 bp=65



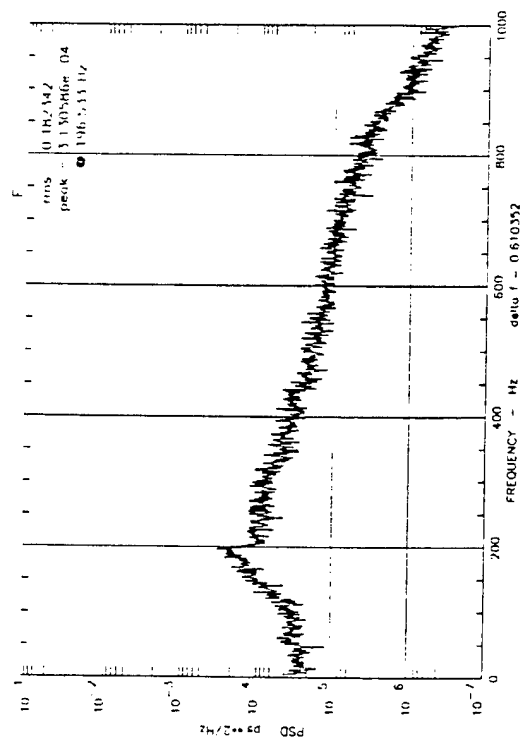
F 15 TPN 3036: alpha=24 beta= 4 bp=65



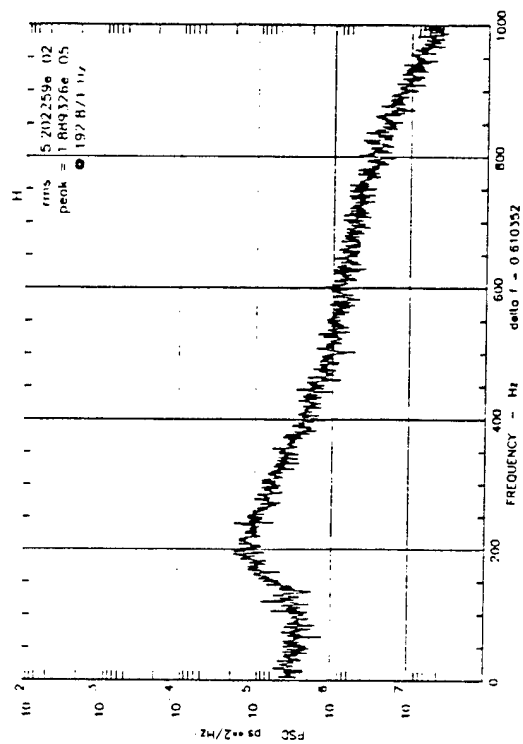
F 15 TPN 3036: alpha=24 beta= 4 bp=65



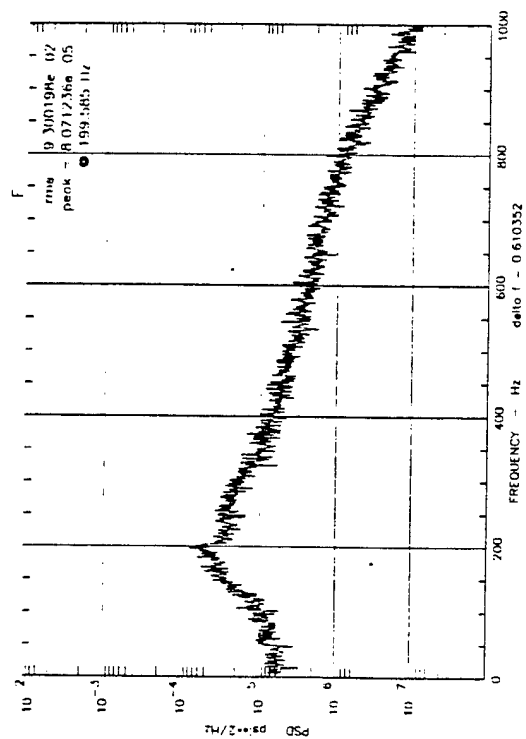
F 15 TPN 3036: alpha-24 beta= 4 bp 65



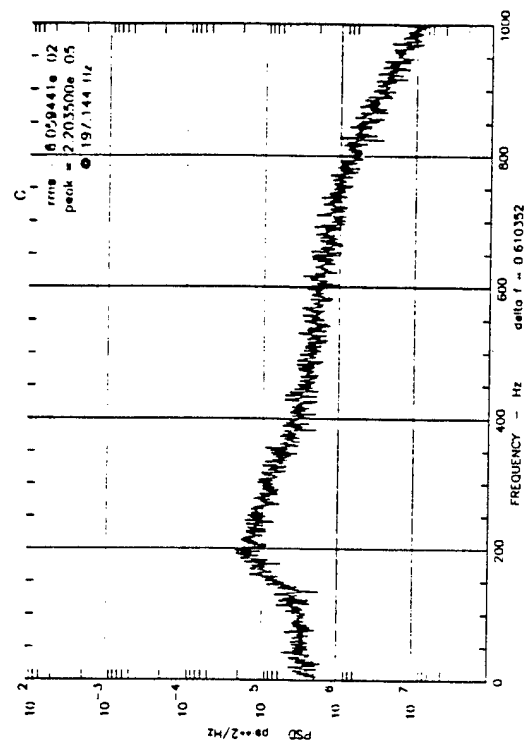
F 15 TPN 3036: alpha-24 beta= 4 bp=65



F 15 TPN 3036: alpha-24 beta= 4 bp=65

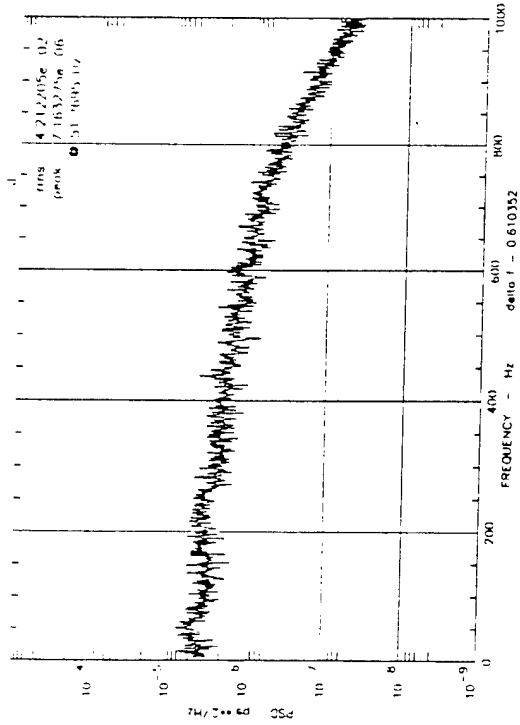


F 15 TPN 3036: alpha-24 beta= 4 bp=65

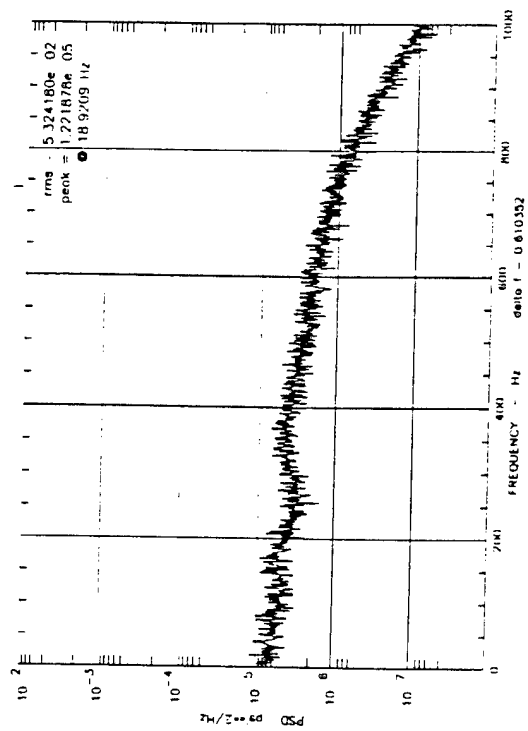




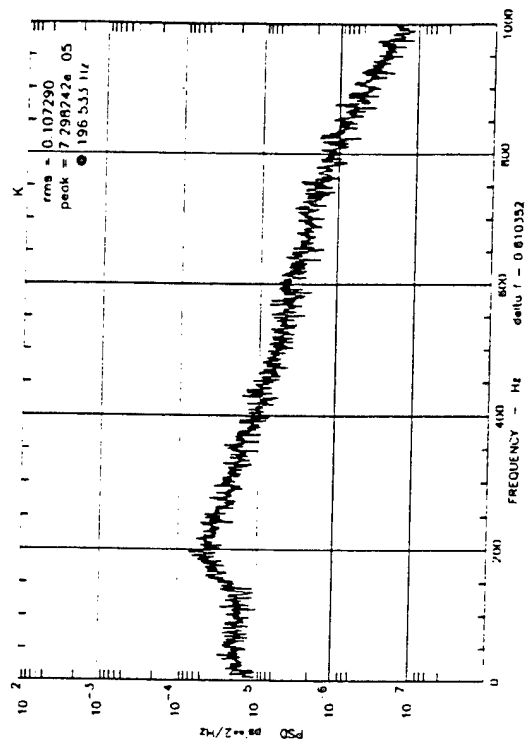
F 15 TPN 3036: alpha-24 beta- 4 bp-65



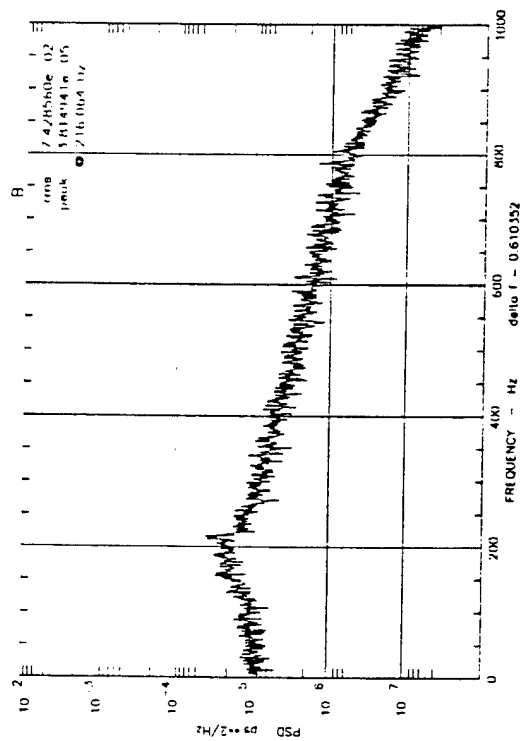
F 15 TPN 3036: alpha-24 beta- 4 bp-65



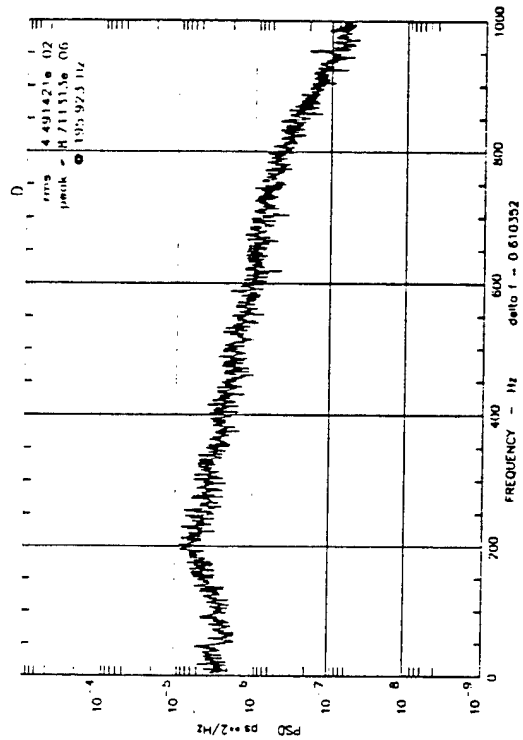
F 15 TPN 3036: alpha-24 beta- 4 bp-65



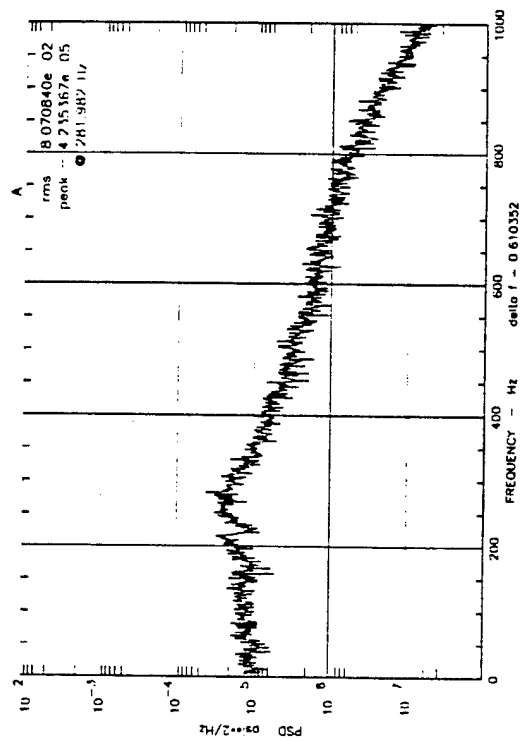
F 15 TPN 2960: alpha=28 beta= 4 bp=65



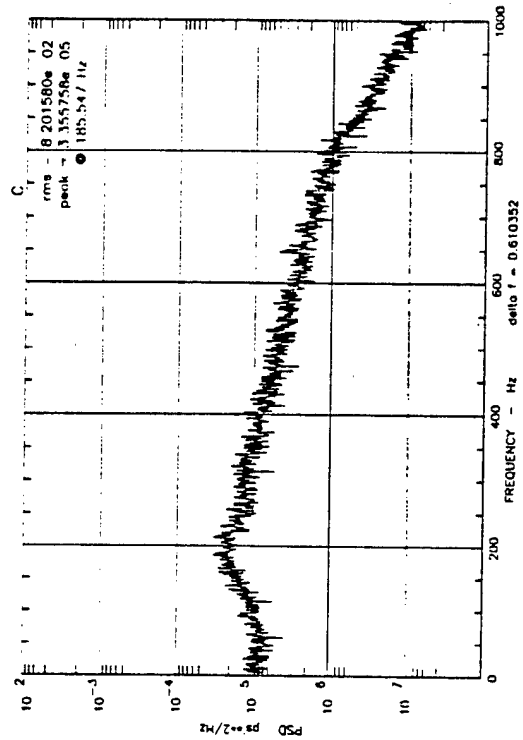
F 15 TPN 2960: alpha=28 beta= 4 bp=65



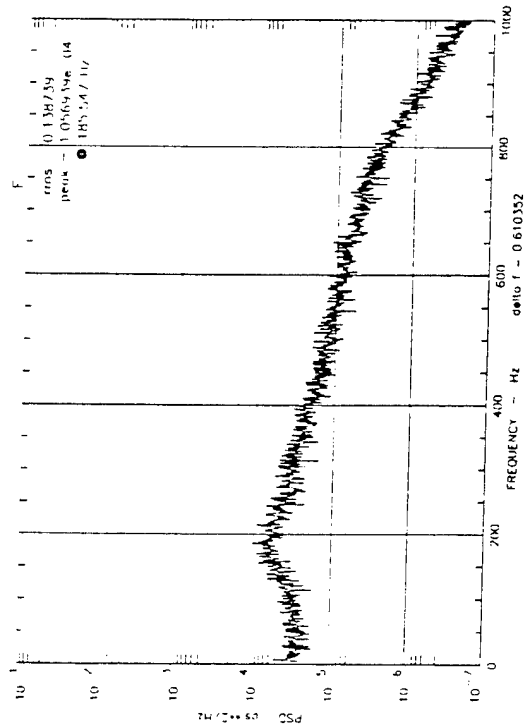
F 15 TPN 2960: alpha=28 beta= 4 bp=65



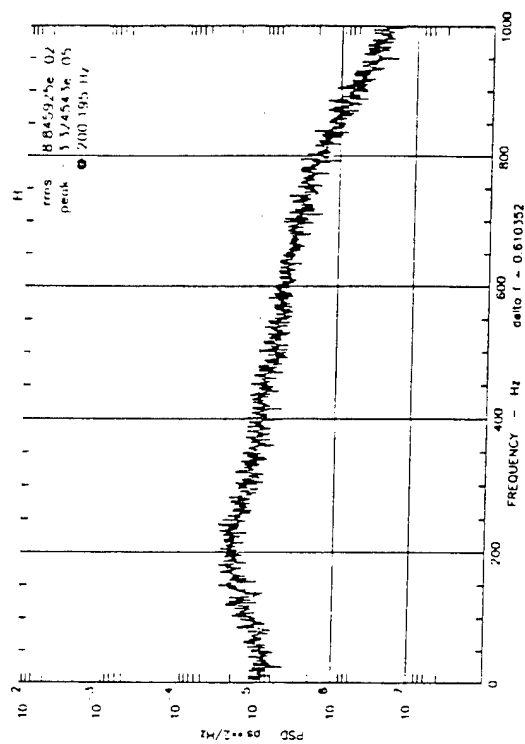
F 15 TPN 2960: alpha=28 beta= 4 bp=65



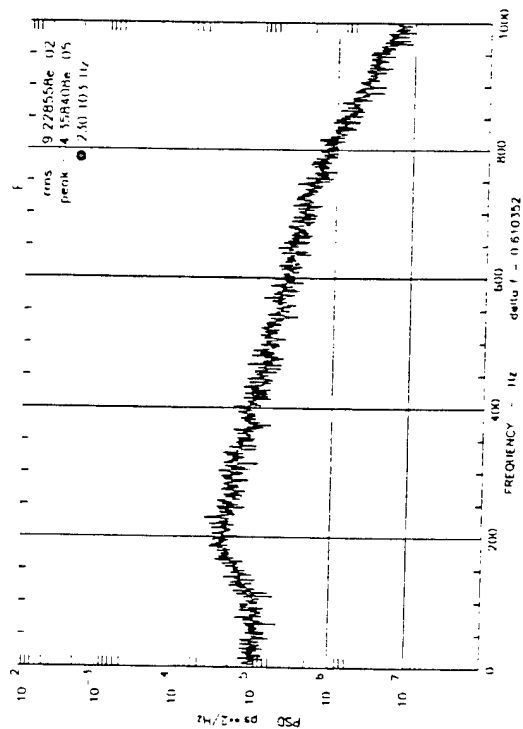
F 15 IPN 2960: alpha-28 beta- 4 bp-65



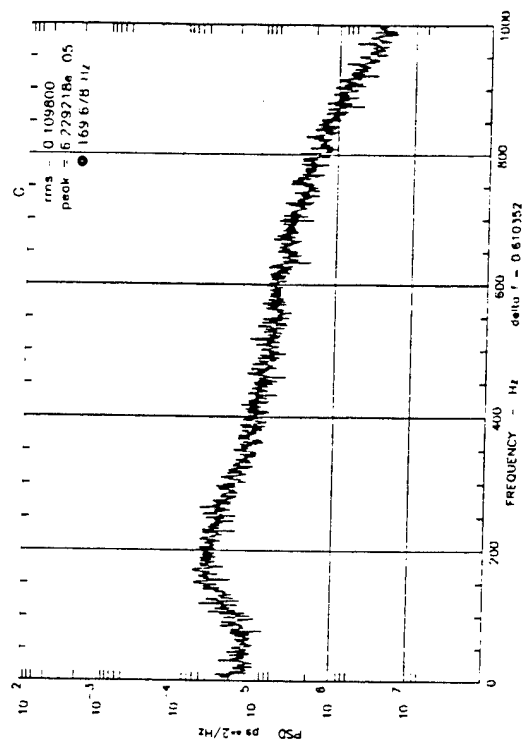
F 15 IPN 2960: alpha-28 beta- 4 bp-65



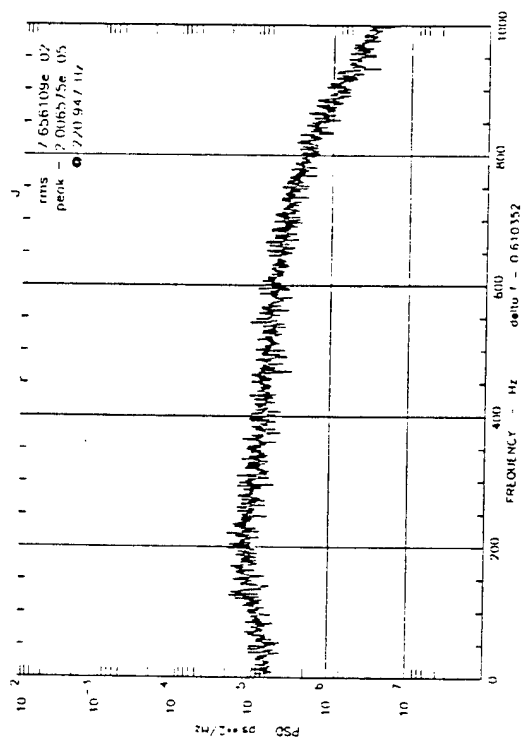
F 15 IPN 2960: alpha-28 beta- 4 bp-65



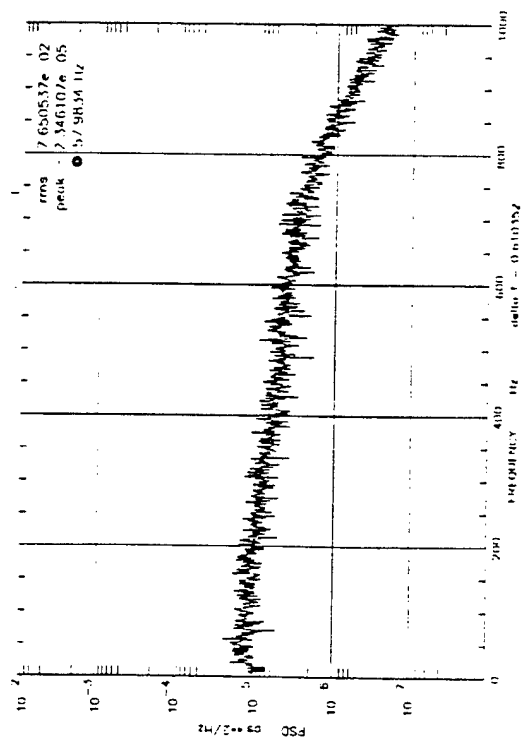
F 15 IPN 2960: alpha-28 beta- 4 bp-65



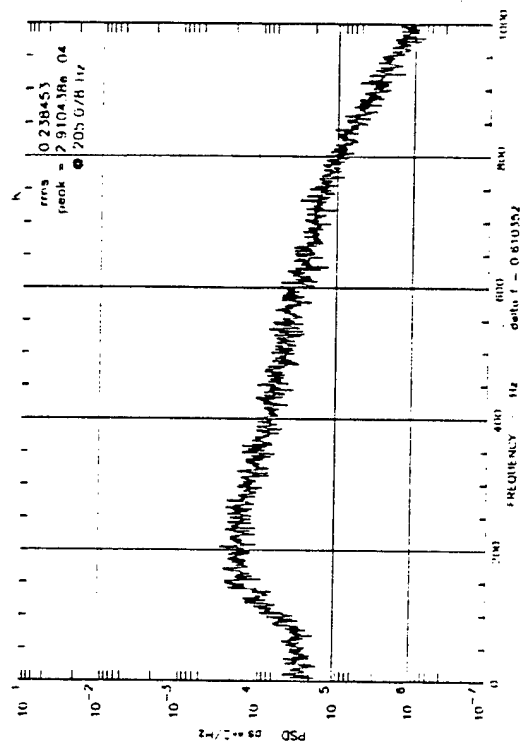
F 15 IPN 2960, alpha=28 beta= 4 bp=65



F 15 IPN 2960, alpha=28 beta= 4 bp=65



F 15 IPN 2960, alpha=28 beta= 4 bp=65

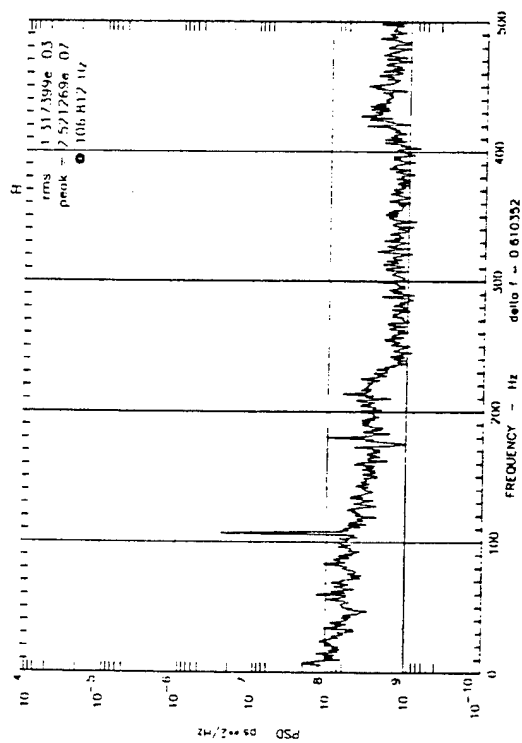


**PRESSURE PSD's**

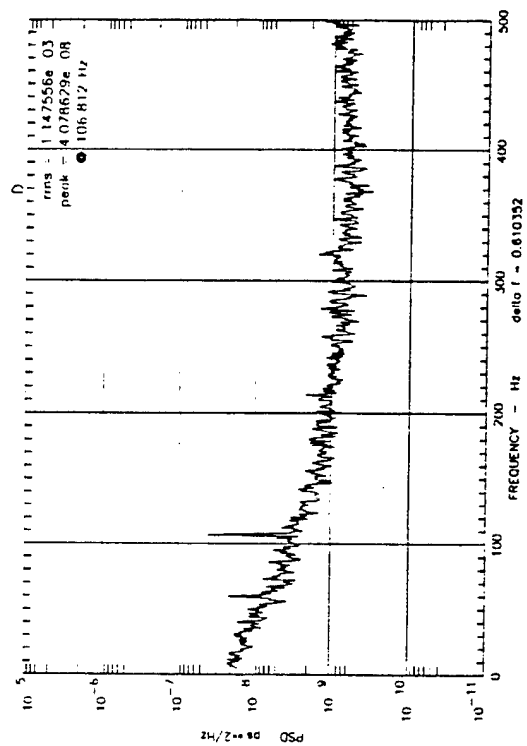
**Q=56 PSF**

**2.1.2.1 PSD GRAPHS( 5- 500 Hz), wbp = 0,45, 65, Beta = 0, +4, -4 Deg,  
Alpha = 8...32 Deg**

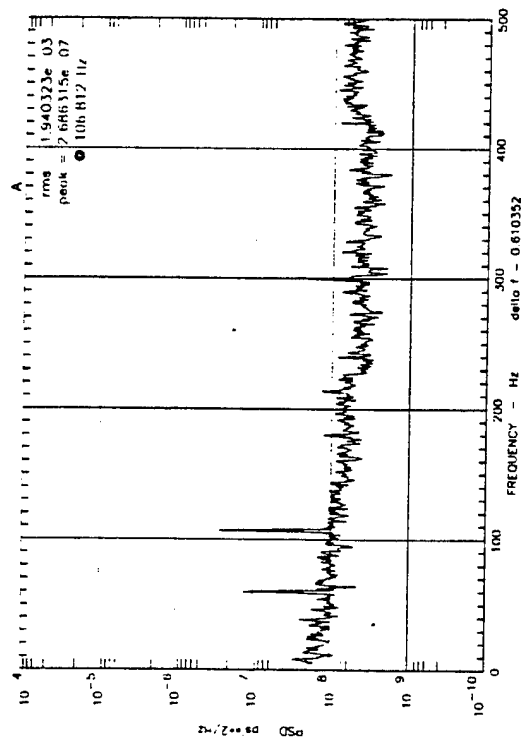
F 15 TPN 2918: alpha-8 beta-4 bp-0



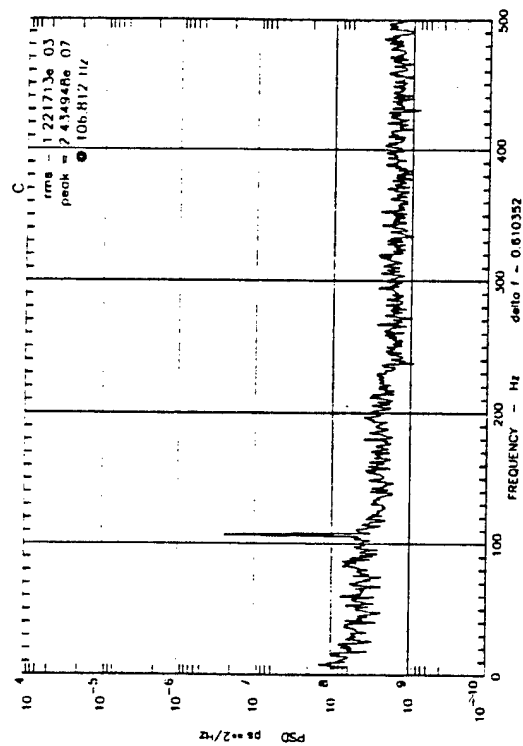
F 15 TPN 2918: alpha-8 beta-4 bp-0



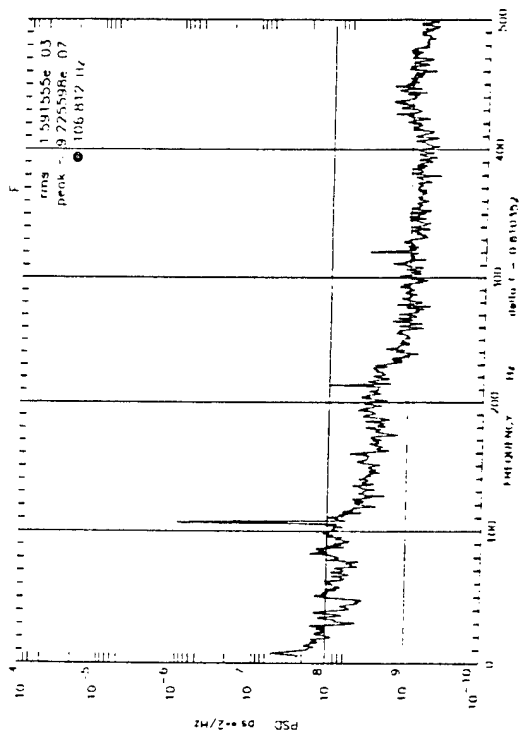
F 15 TPN 2918: alpha-8 beta-4 bp-0



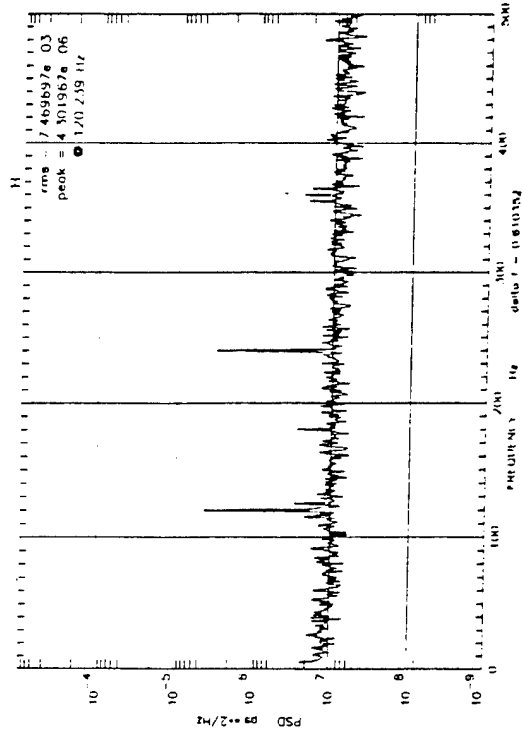
F 15 TPN 2918: alpha-8 beta-4 bp-0



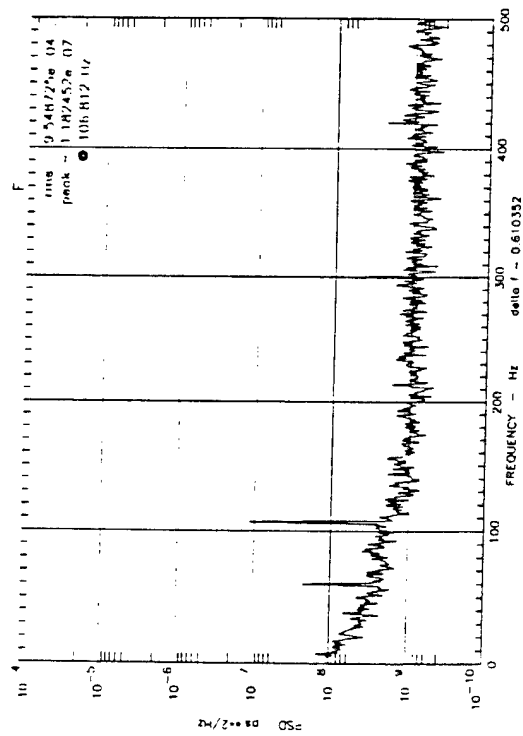
F 15 IPN 2918: alpha=8 beta=4 bp=0



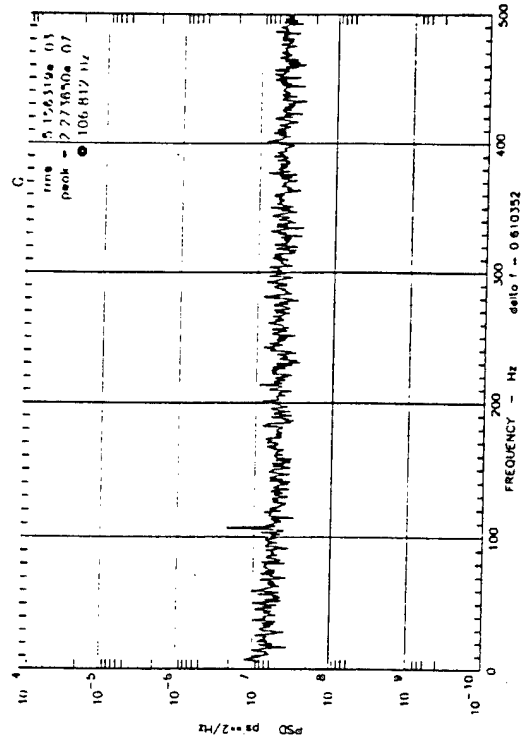
F 15 IPN 2918: alpha=8 beta=4 bp=0



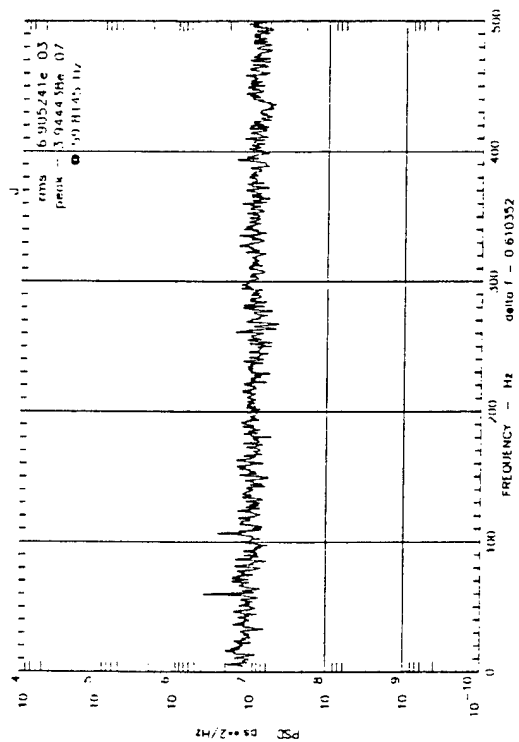
F 15 IPN 2918: alpha=8 beta=4 bp=0



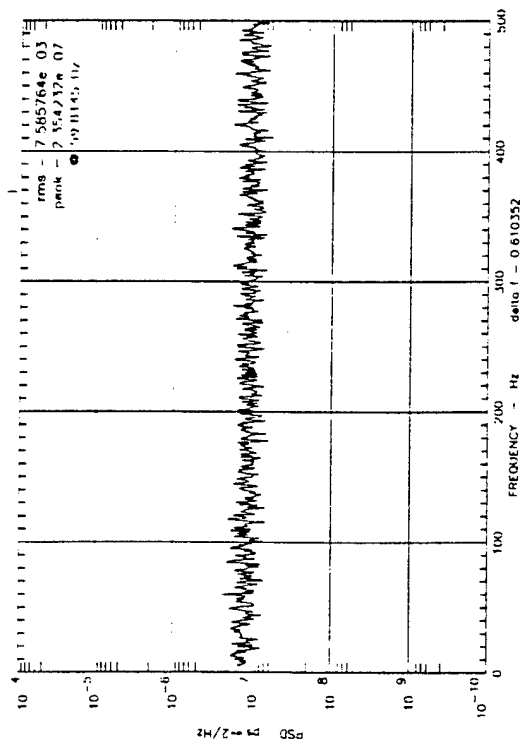
F 15 IPN 2918: alpha=8 beta=4 bp=0



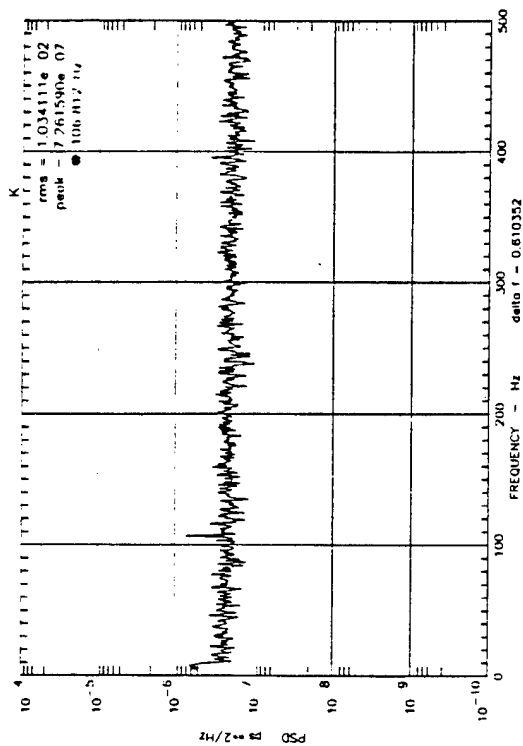
F 15 IPN 2918: alpha-8 beta-4 bp-0



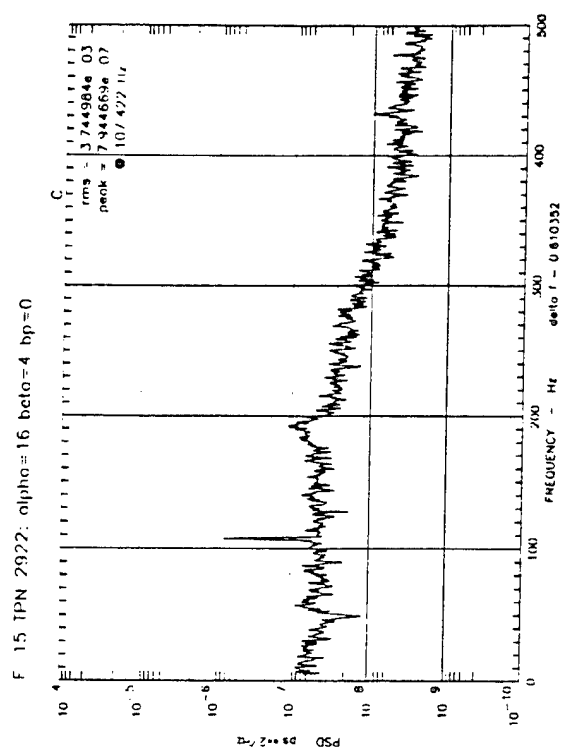
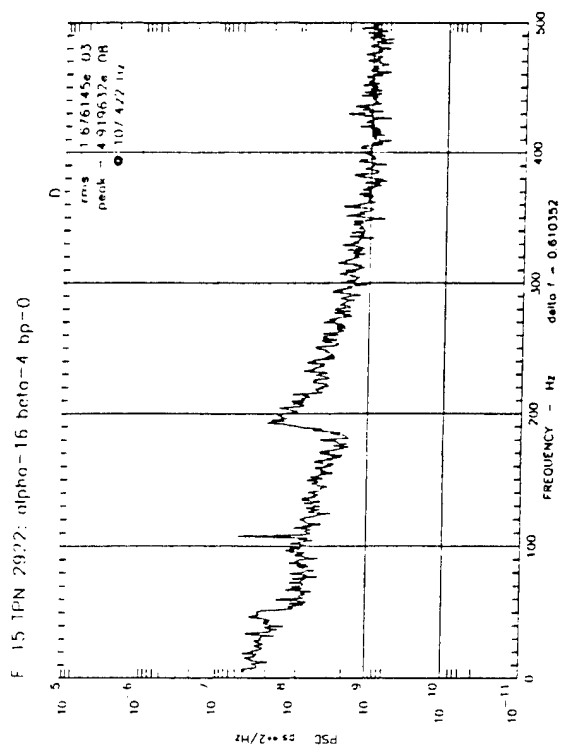
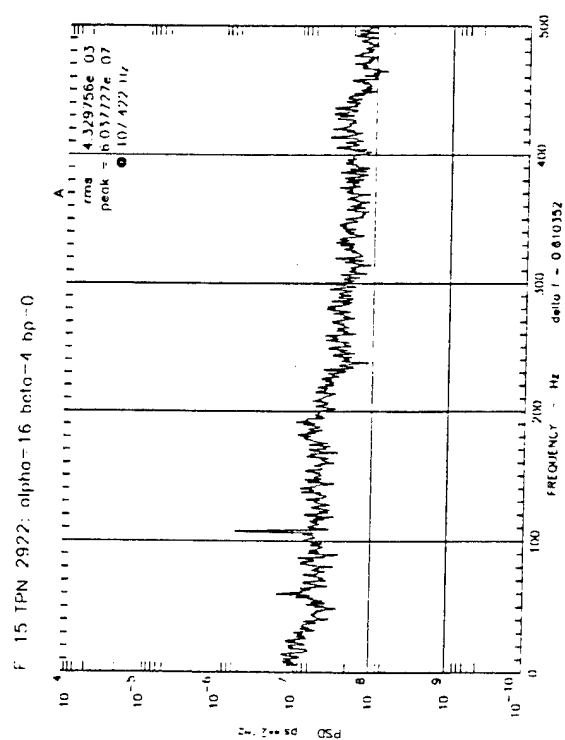
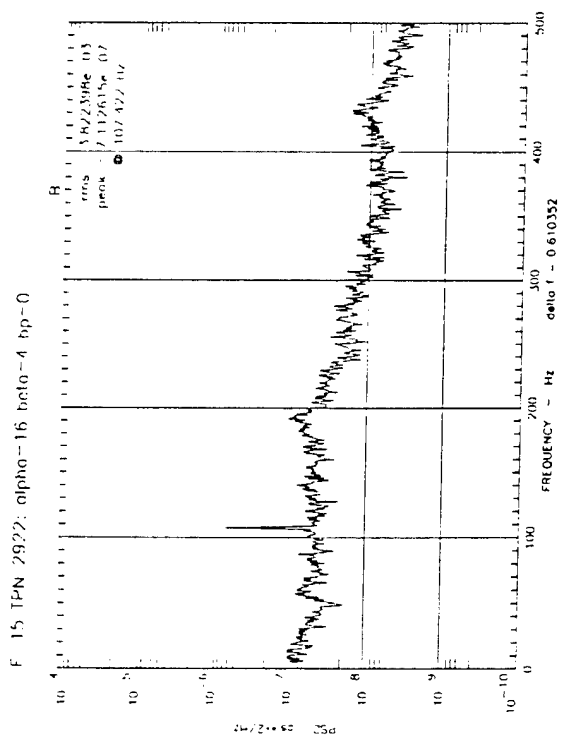
F 15 IPN 2918: alpha-8 beta-4 bp-0



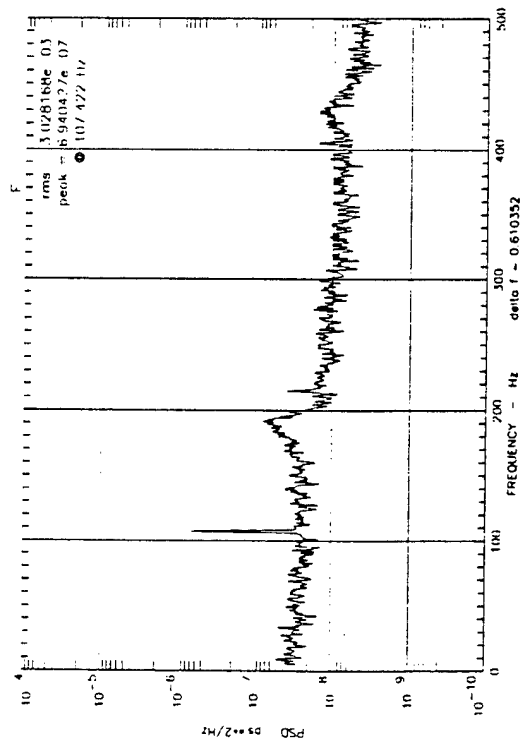
F 15 IPN 2918: alpha-8 beta-4 bp-0



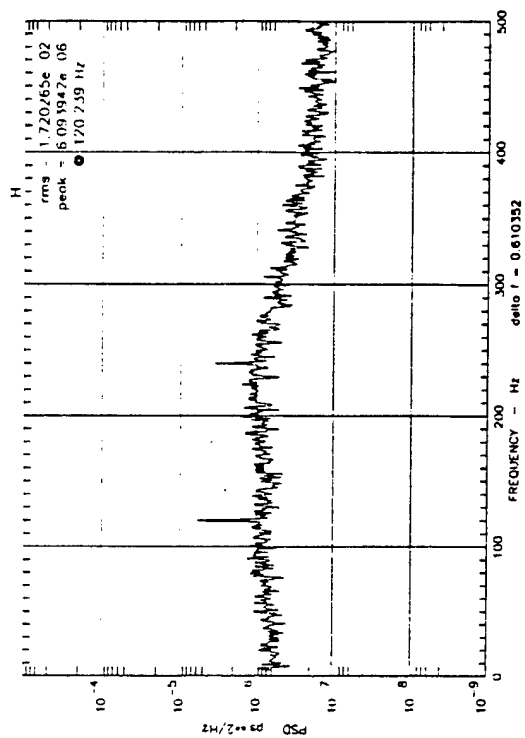




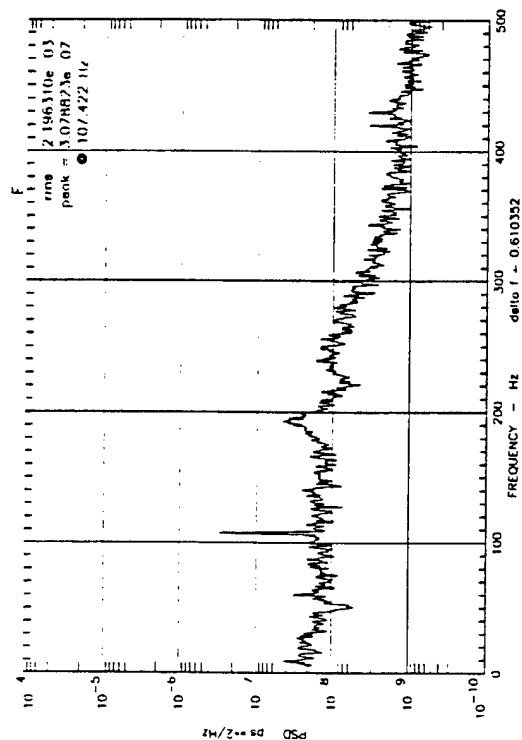
F 15 TPN 2922: alpha=16 beta=4 bp=0



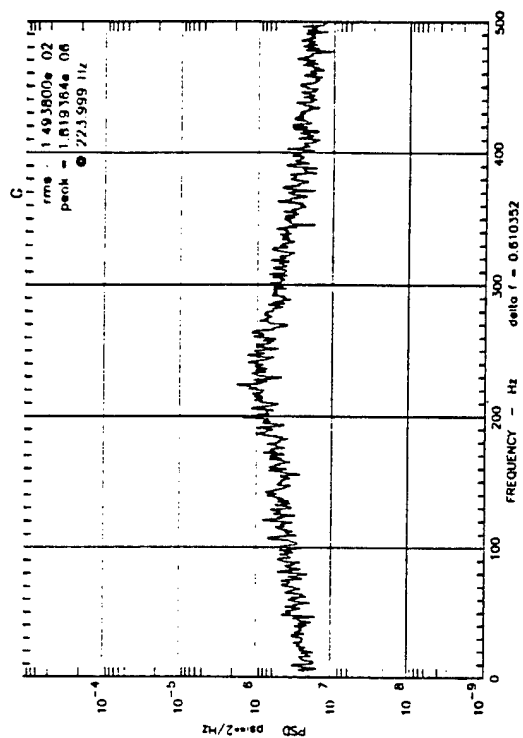
F 15 TPN 2922: alpha=16 beta=4 bp=0

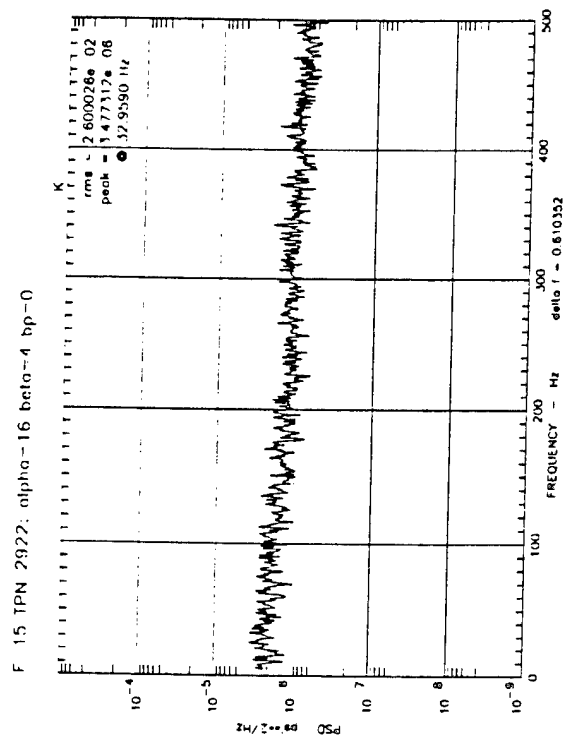
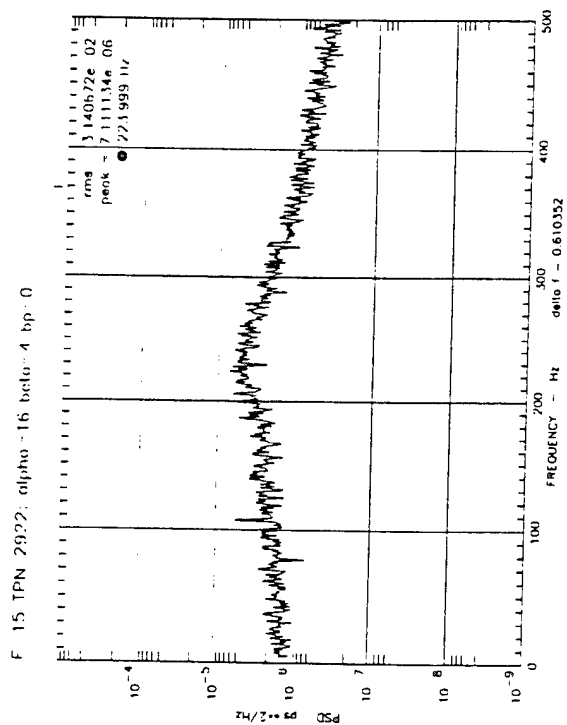
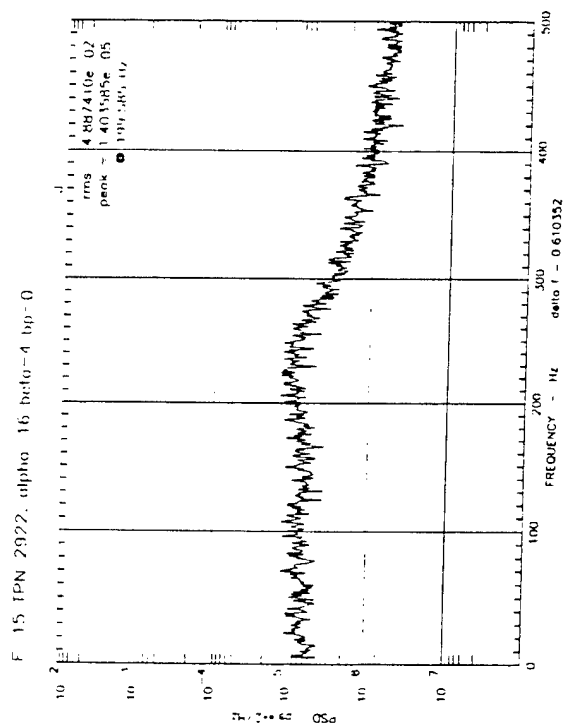


F 15 TPN 2922: alpha=16 beta=4 bp=0

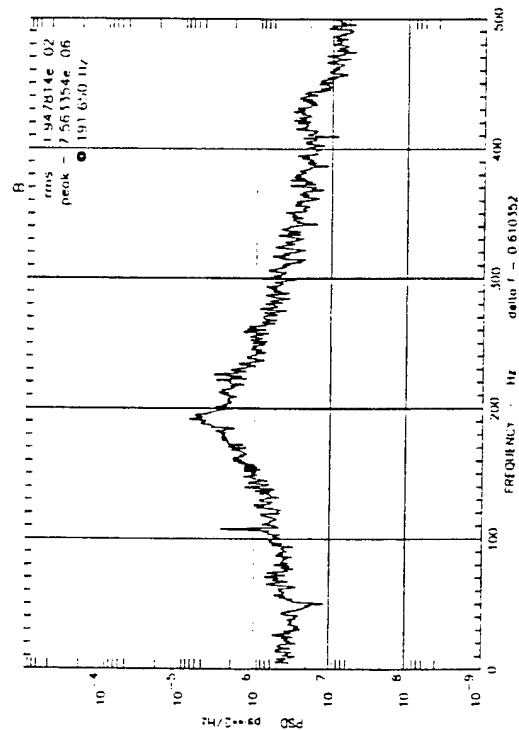


F 15 TPN 2922: alpha=16 beta=4 bp=0

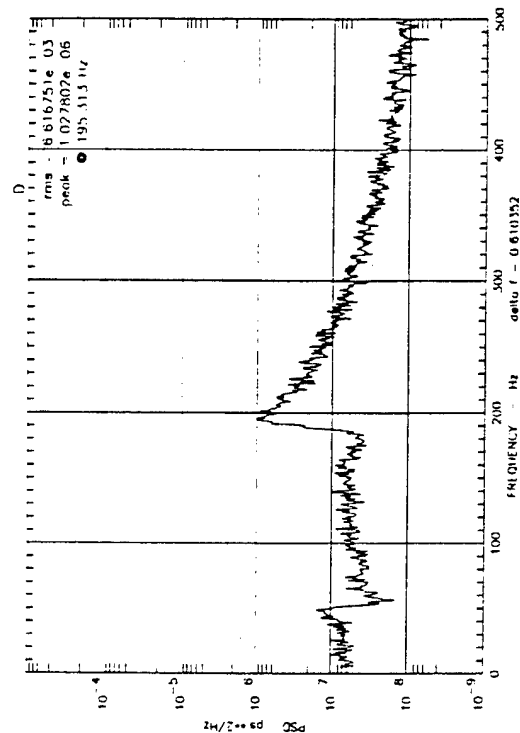




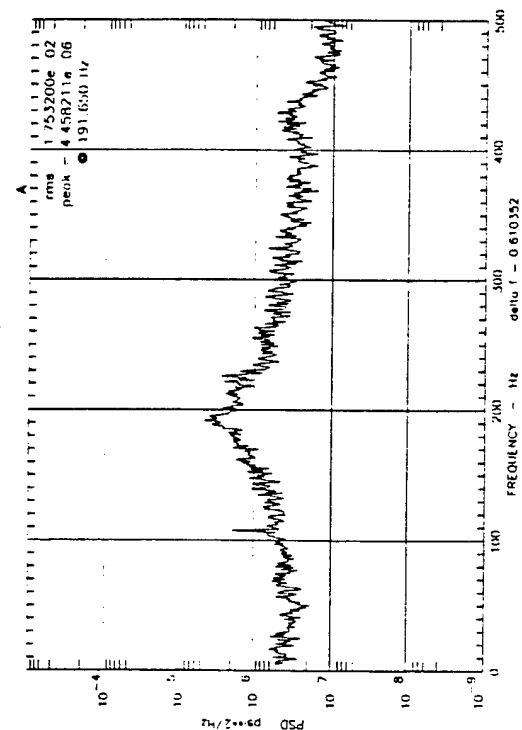
F 15 IPN 2924; alpha=20 beta=4 bp=0



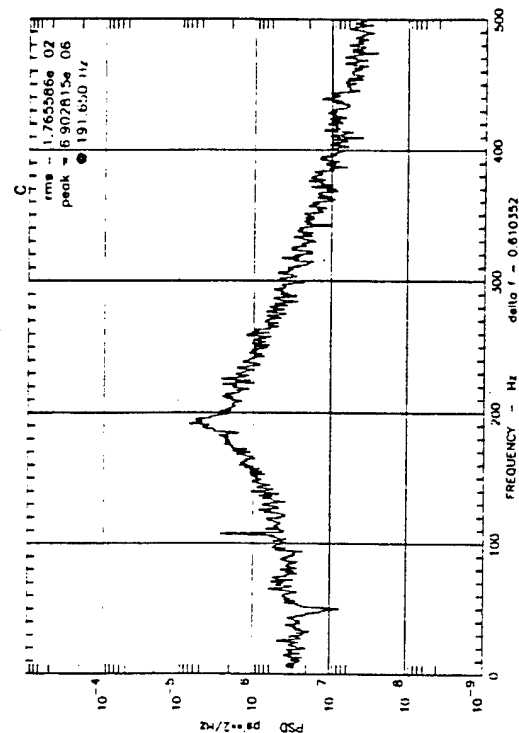
F 15 IPN 2924; alpha=20 beta=4 bp=0



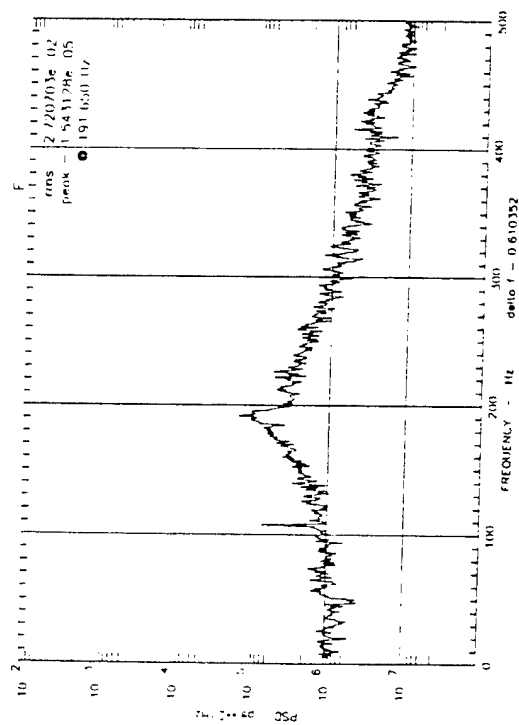
F 15 IPN 2924; alpha=20 beta=4 bp=0



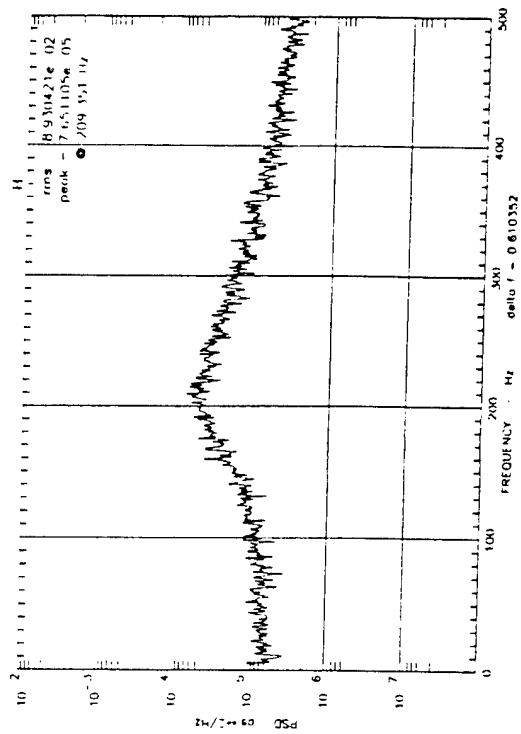
F 15 IPN 2924; alpha=20 beta=4 bp=0



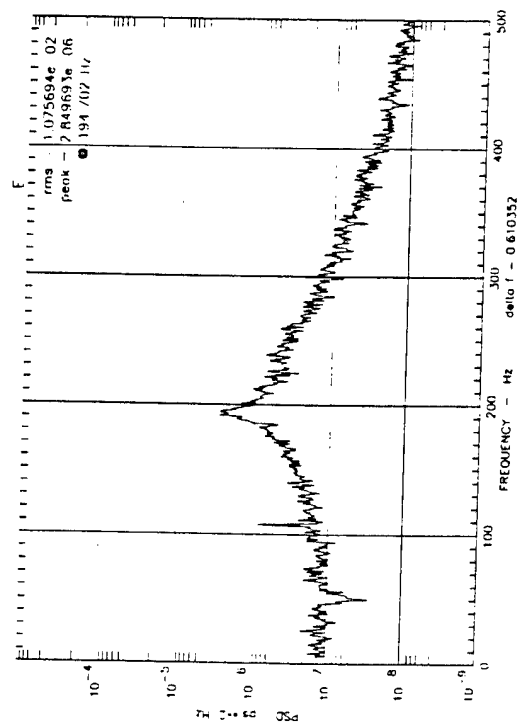
F 15 IPN 2924; alpha=20 beta=4 bp=0



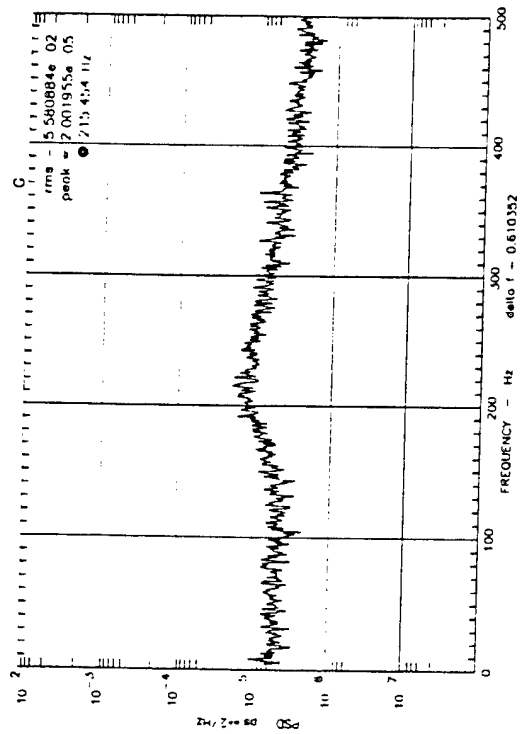
F 15 IPN 2924; alpha=20 beta=4 bp=0



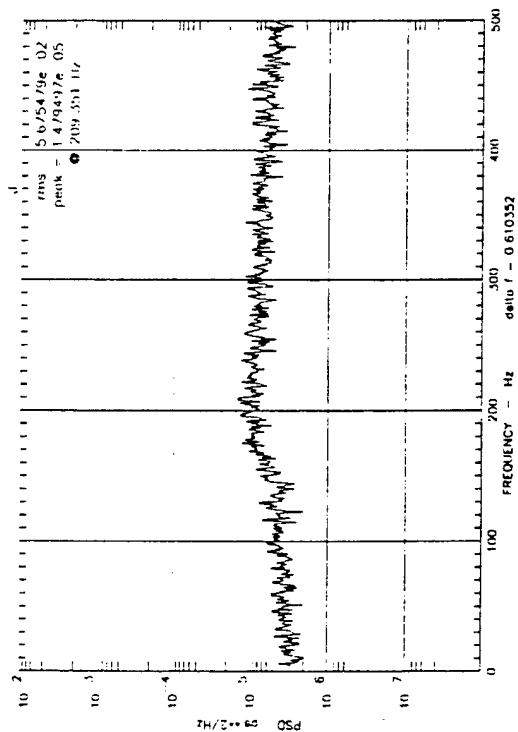
F 15 IPN 2924; alpha=20 beta=4 bp=0



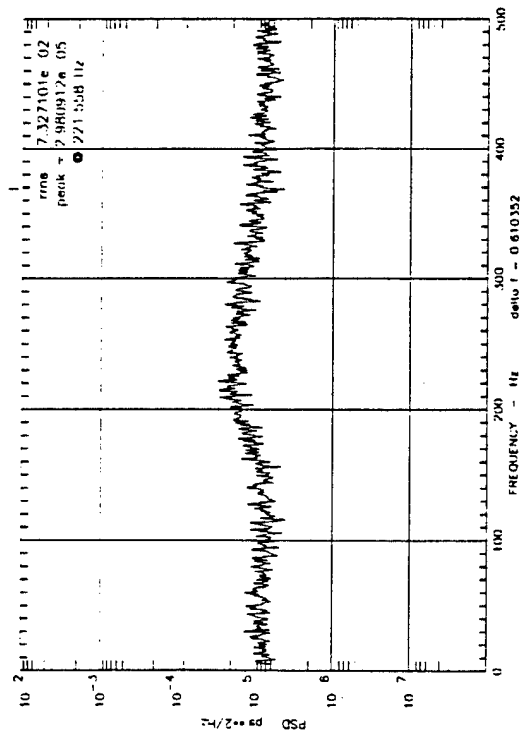
F 15 IPN 2924; alpha=20 beta=4 bp=0



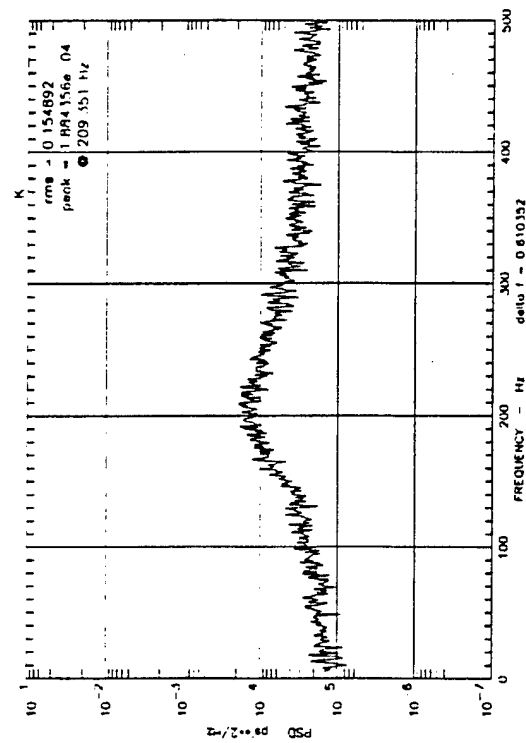
F 15 TPN 2924: alpha=20 beta=4 bp=0



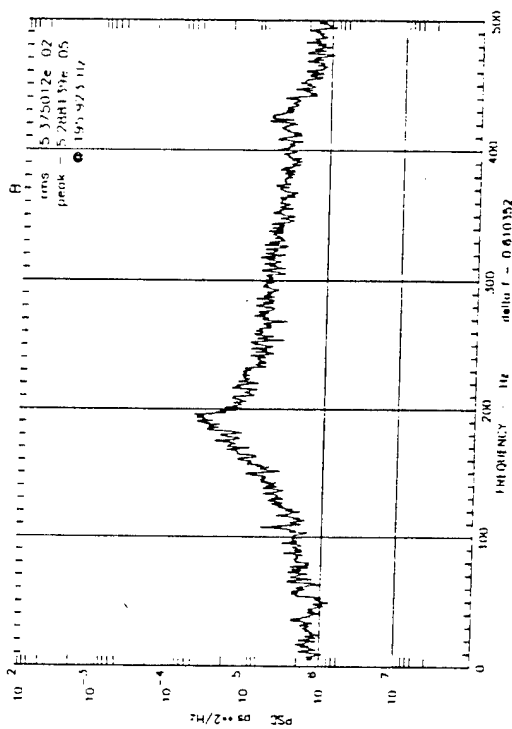
F 15 TPN 2924: alpha=20 beta=4 bp=0



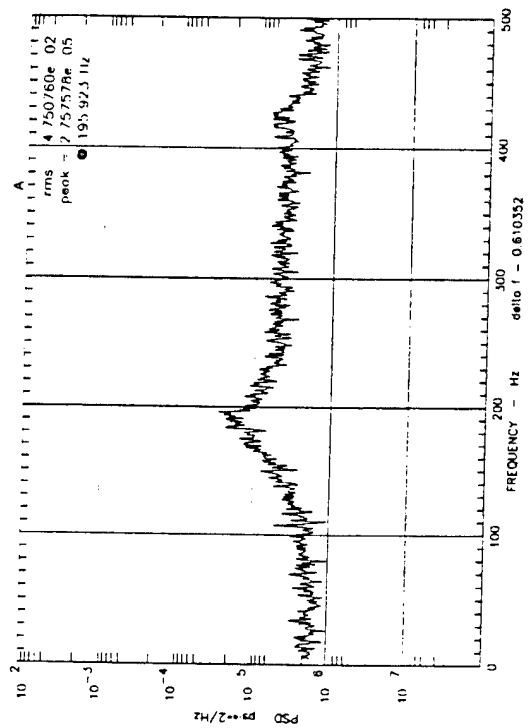
F 15 TPN 2924: alpha=20 beta=4 bp=0



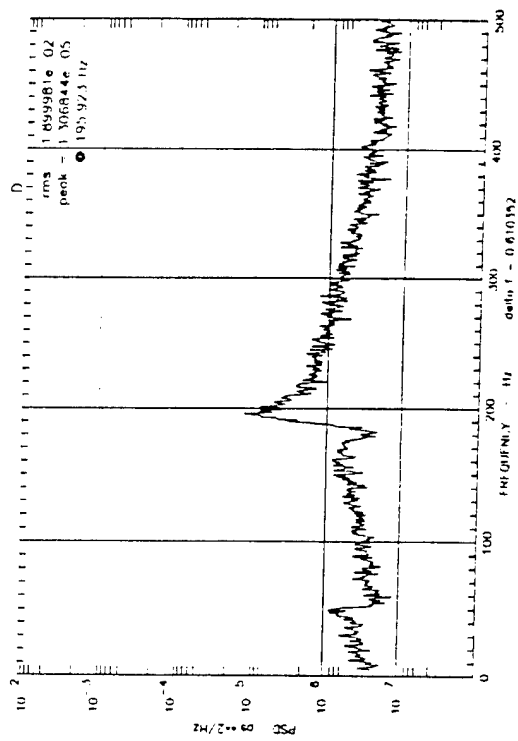
F 15 IPN 2926: alpha=24 beta=4 bp=0



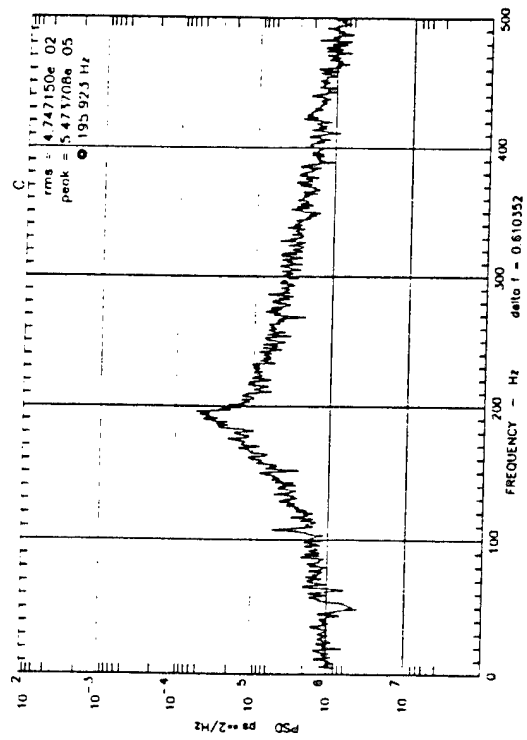
F 15 IPN 2926: alpha=24 beta=4 bp=0



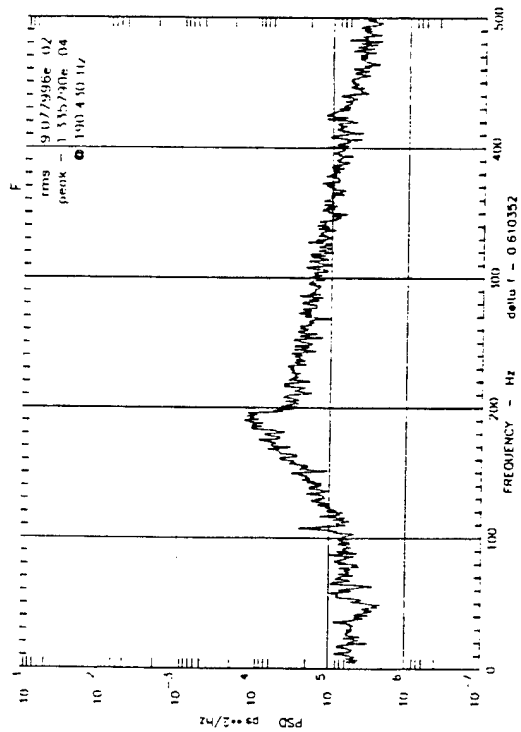
F 15 IPN 2926: alpha=24 beta=4 bp=0



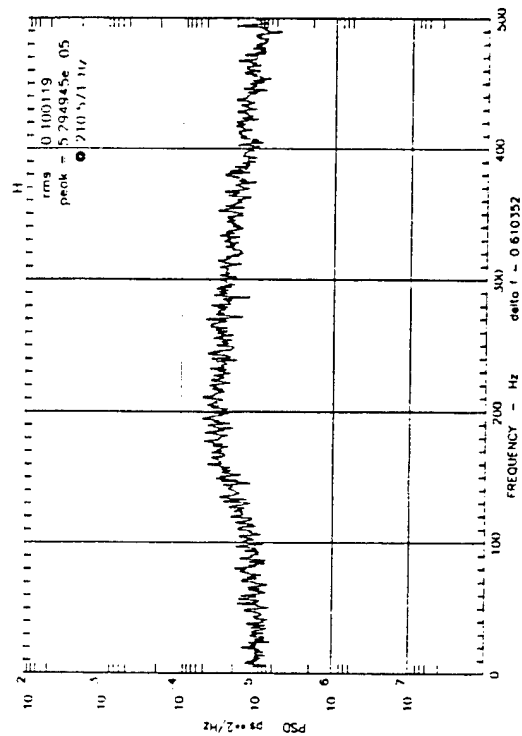
F 15 IPN 2926: alpha=24 beta=4 bp=0



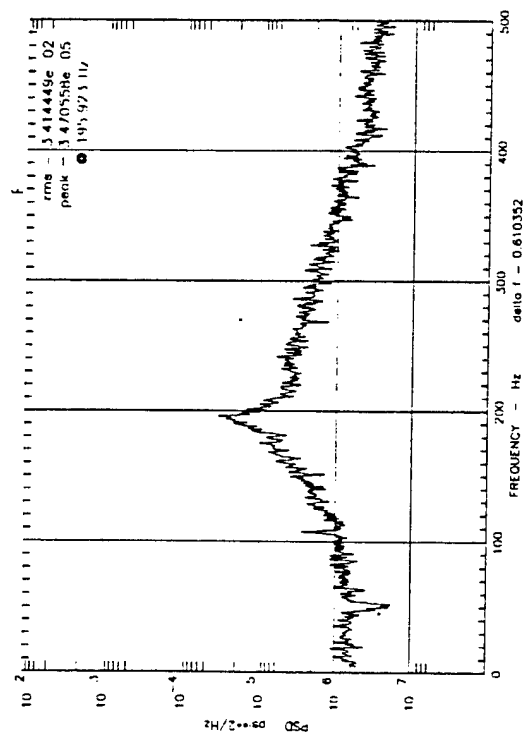
F 15 TPN 2926: alpha=24 beta=4 bp=0



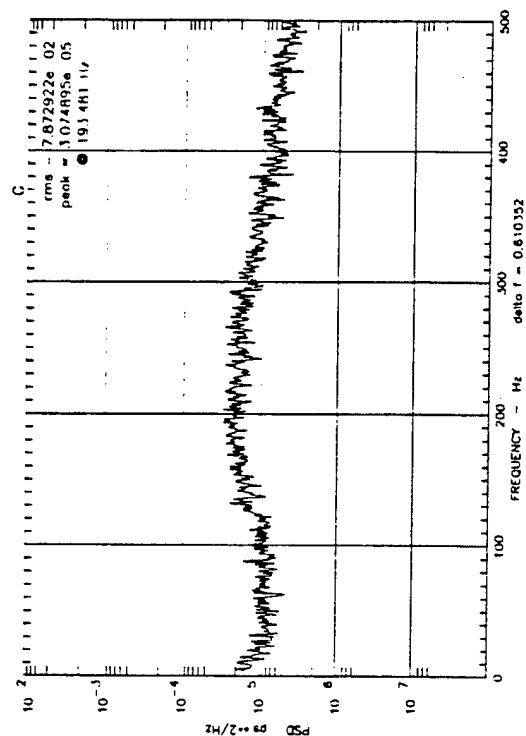
F 15 TPN 2926: alpha=24 beta=4 bp=0



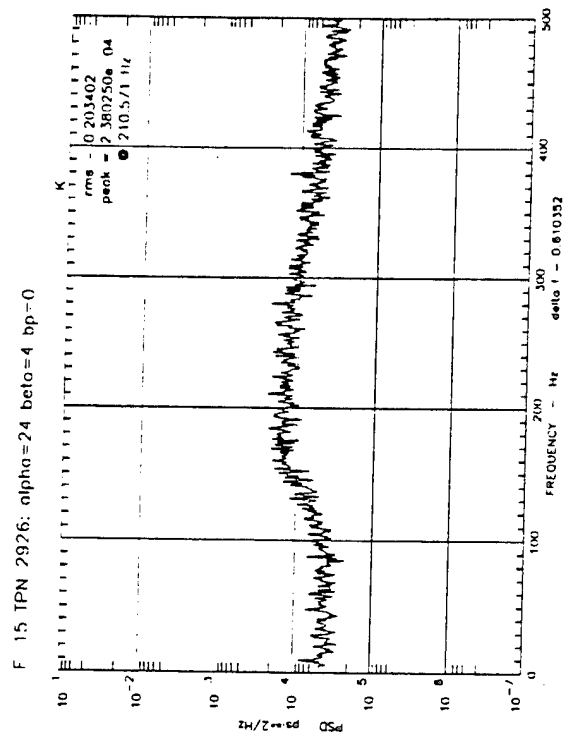
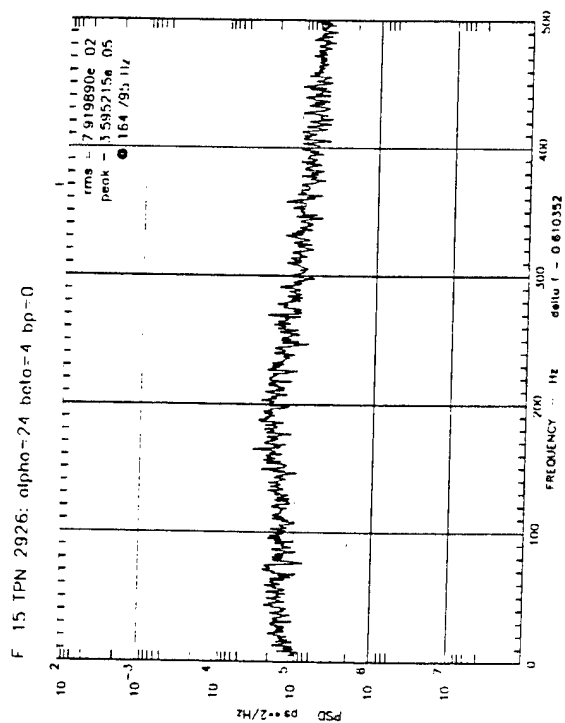
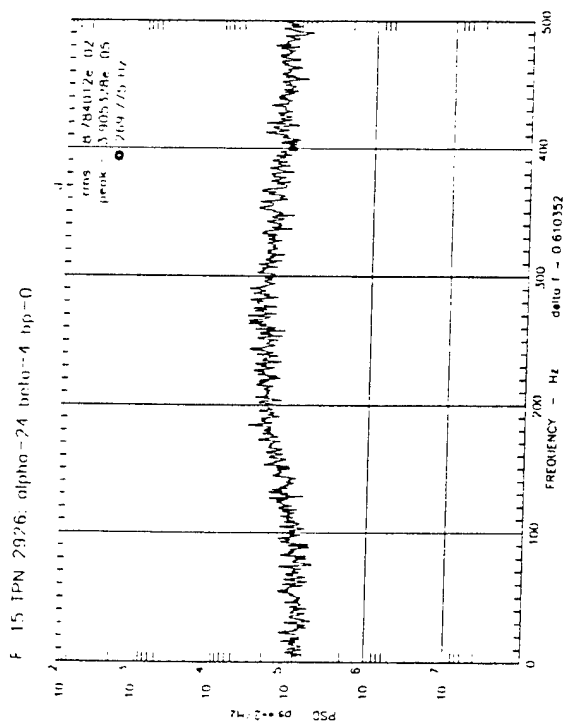
F 15 TPN 2926: alpha=24 beta=4 bp=0



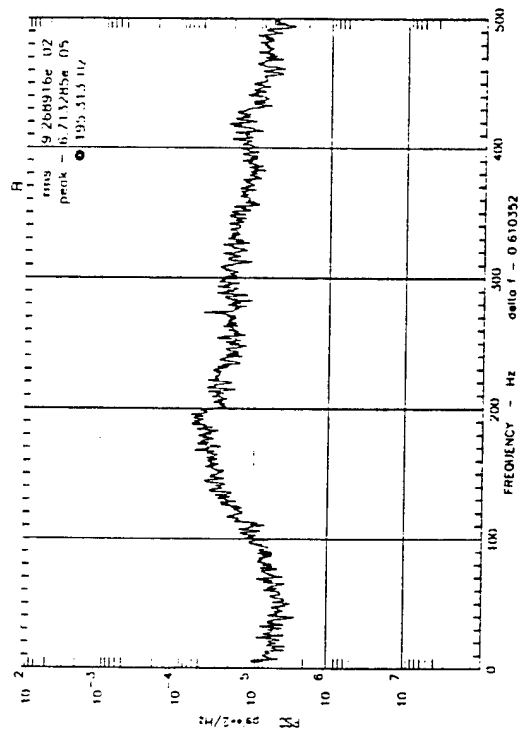
F 15 TPN 2926: alpha=24 beta=4 bp=0



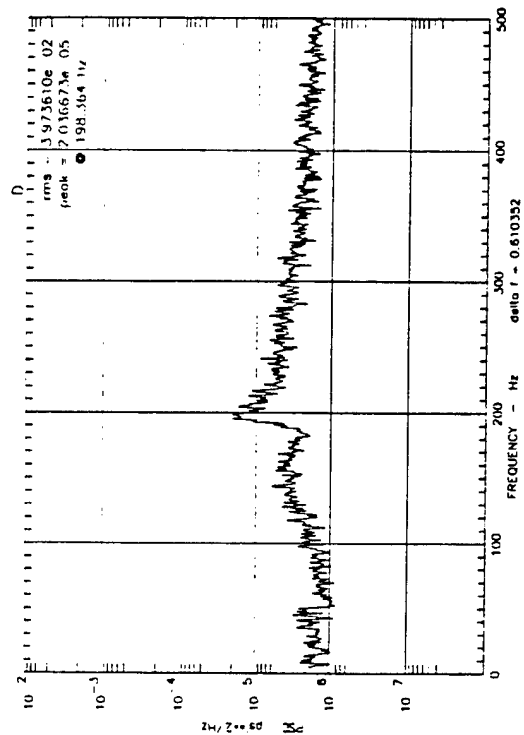




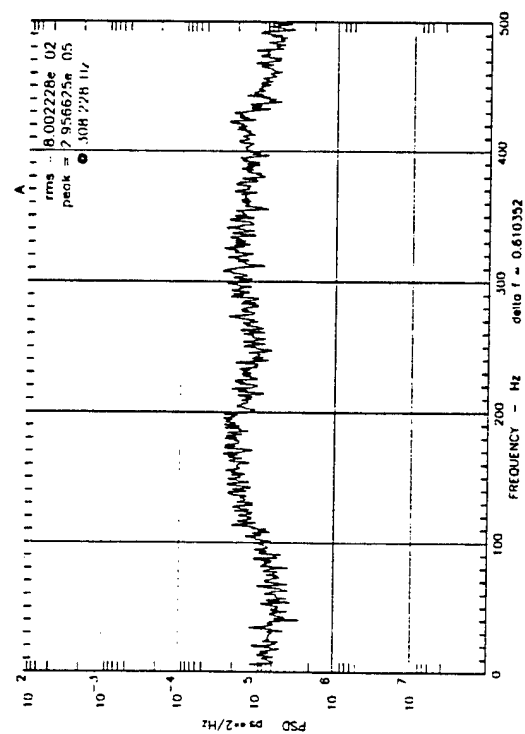
F 15 TPN 2927: alpha=28 beta=4 bp=0



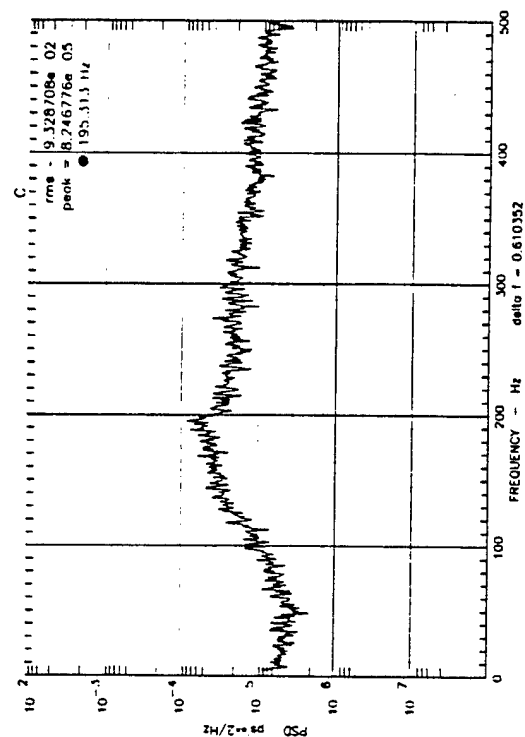
F 15 TPN 2927: alpha=28 beta=4 bp=0



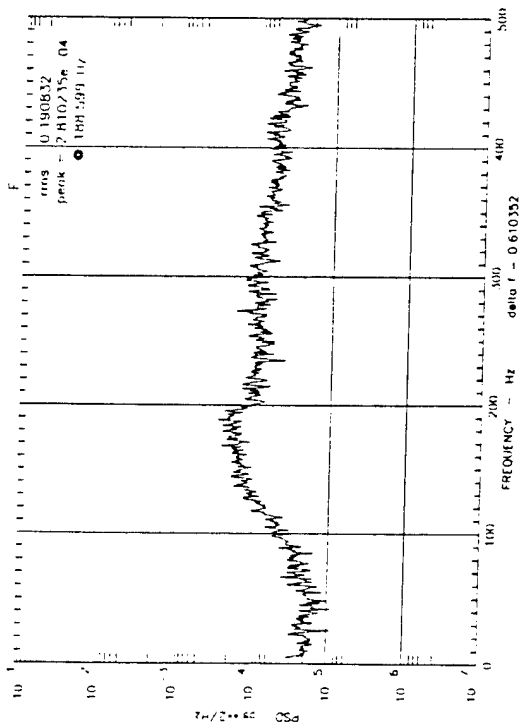
F 15 TPN 2927: alpha=28 beta=4 bp=0



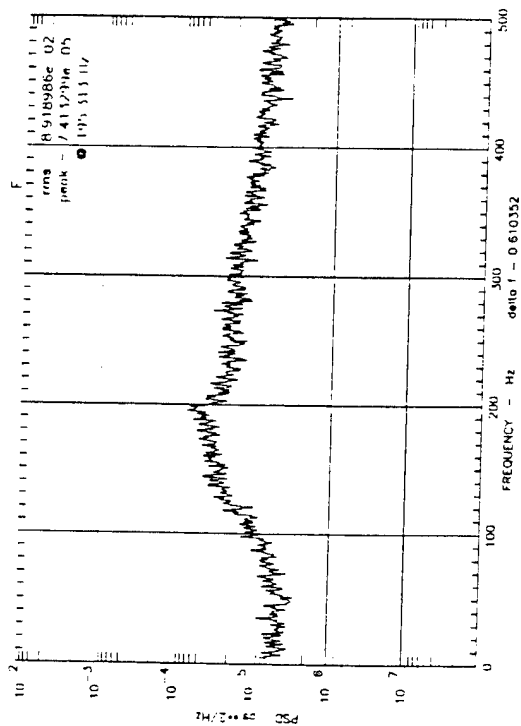
F 15 TPN 2927: alpha=28 beta=4 bp=0



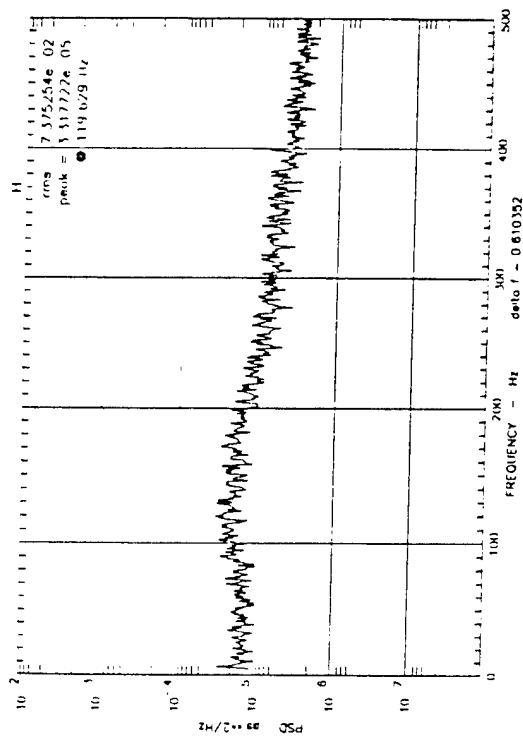
F 15 IPN 2927: alpha-28 beta-4 bp-0



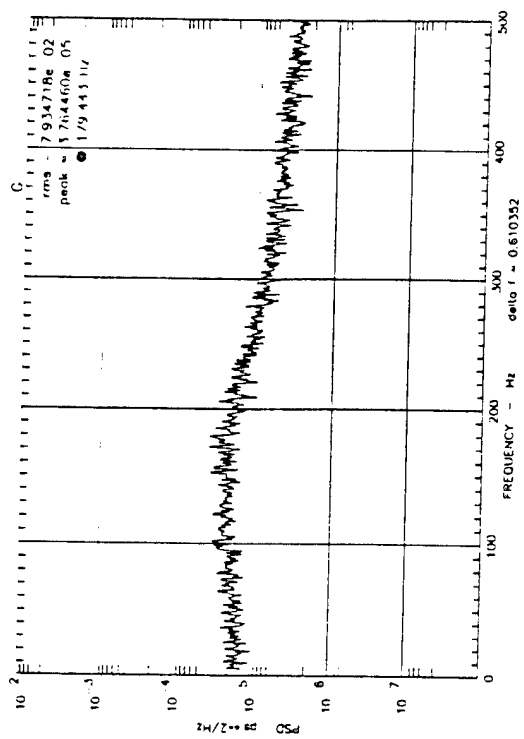
F 15 IPN 2927: alpha-28 beta-4 bp-0



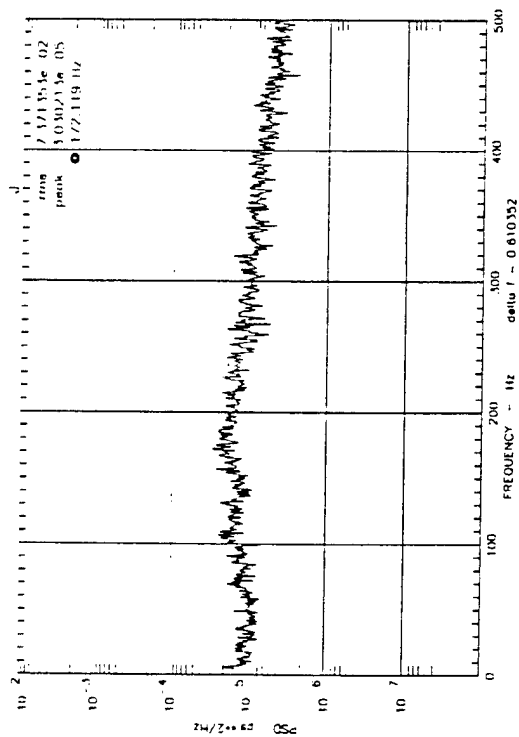
F 15 IPN 2927: alpha-28 beta-4 bp-0



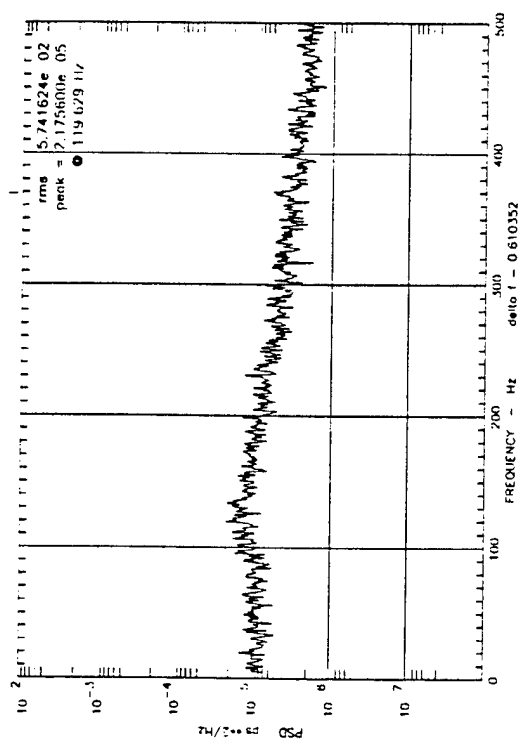
F 15 IPN 2927: alpha-28 beta-4 bp-0



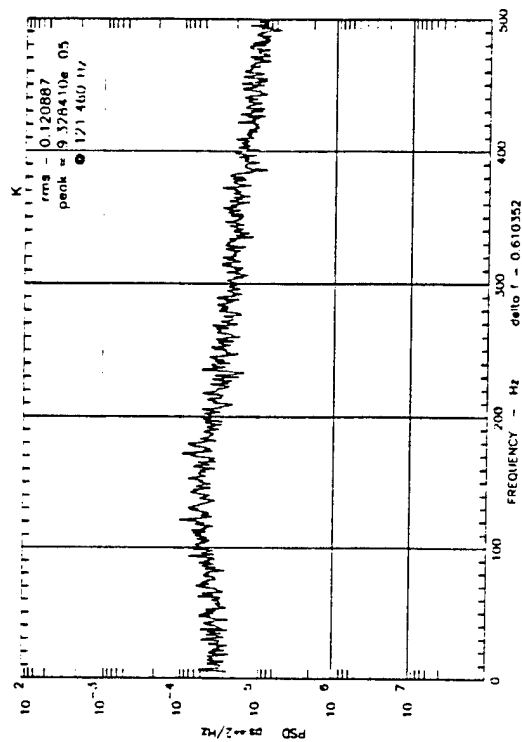
F 15 TPN 2927: alpha=28 beta=4 bp=0



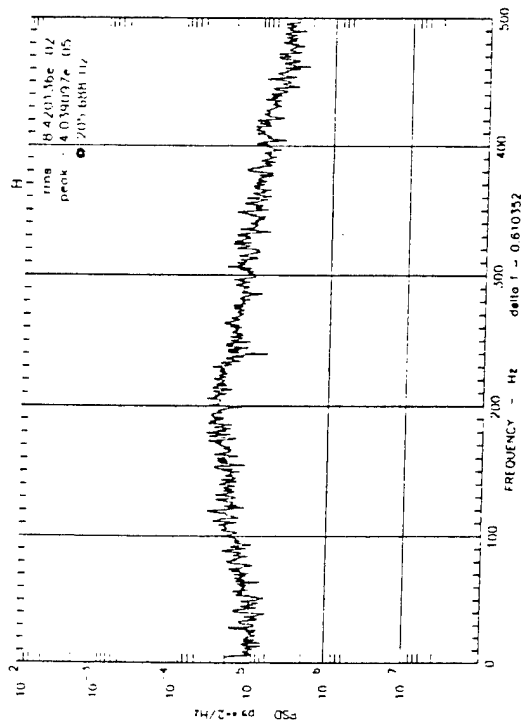
F 15 TPN 2927: alpha=28 beta=4 bp=0



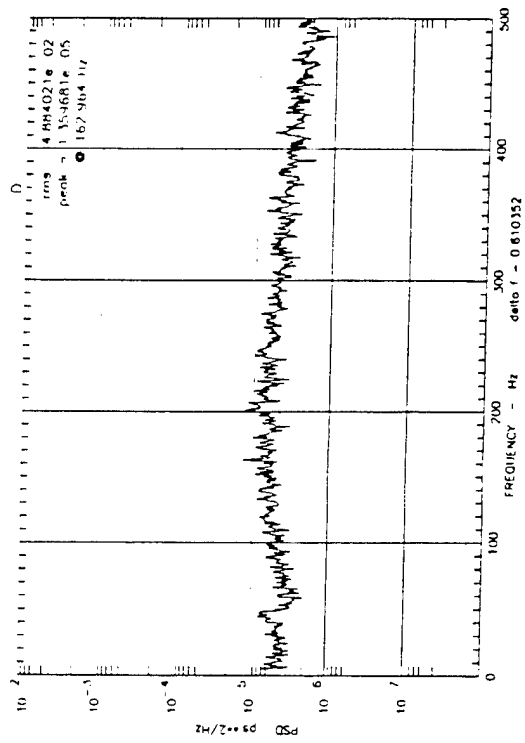
F 15 TPN 2927: alpha=28 beta=4 bp=0



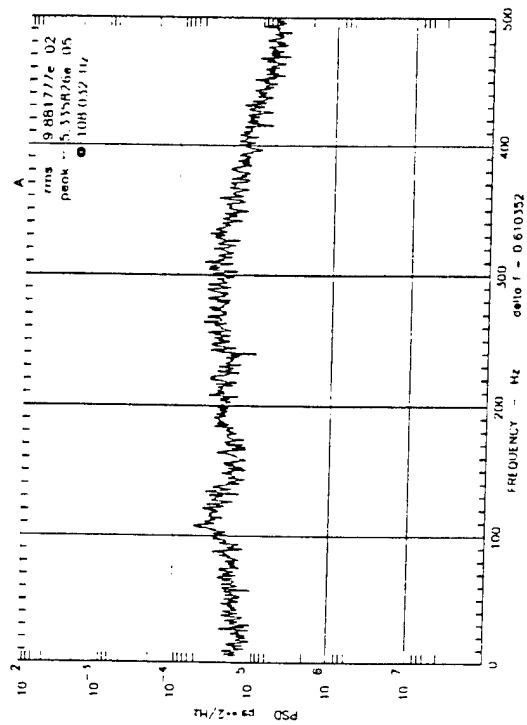
F 15 IPN 2928: alpha-32 beta-4 bp-0



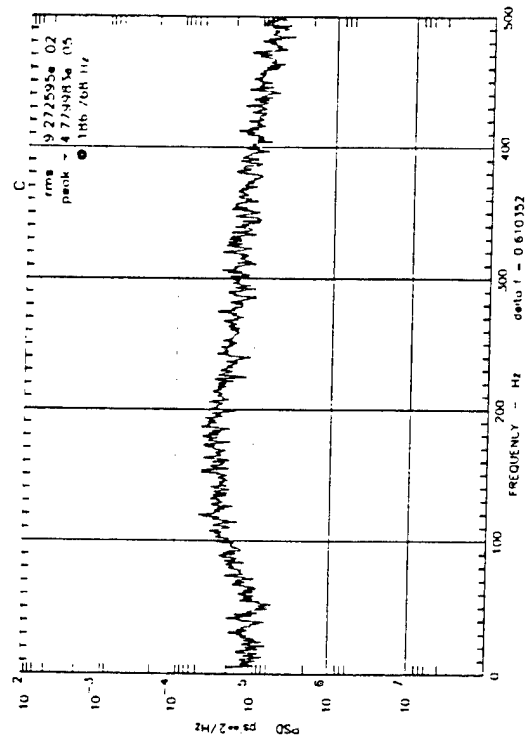
F 15 IPN 2928: alpha-32 beta-4 bp-0



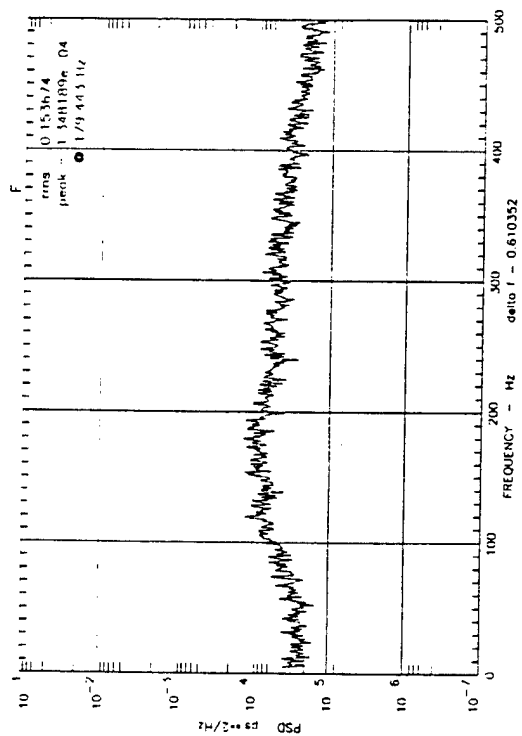
F 15 IPN 2928: alpha-32 beta-4 bp-0



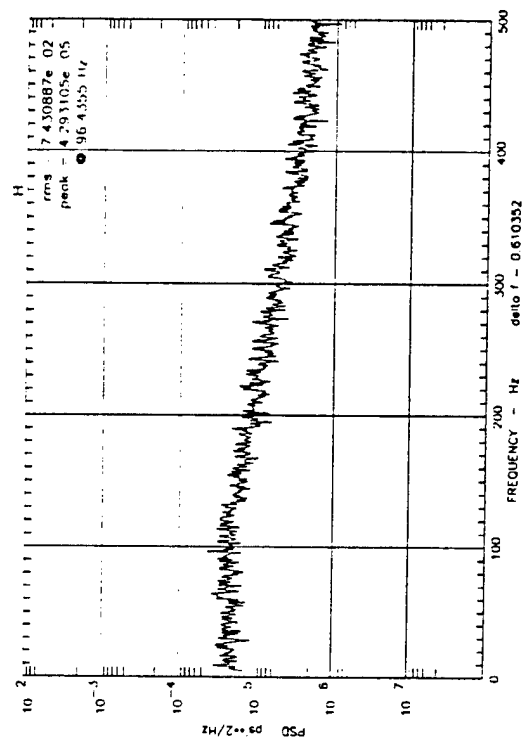
F 15 IPN 2928: alpha-32 beta-4 bp=0



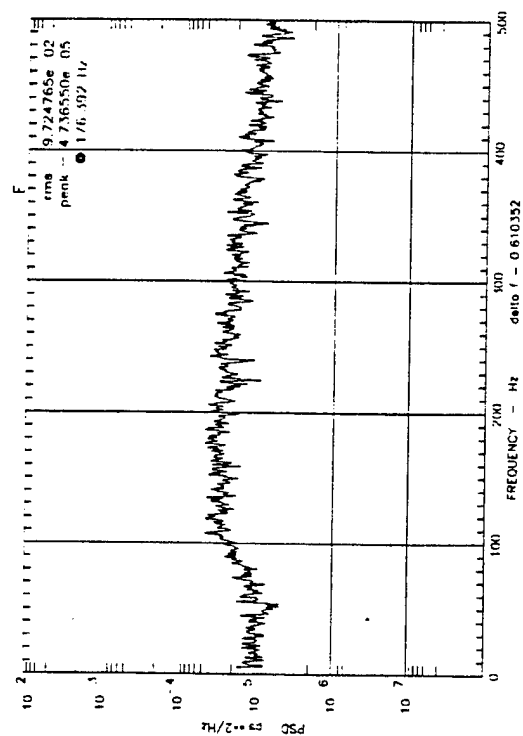
F 15 TPN 2928:  $\alpha=32$   $\beta=4$   $\beta=0$



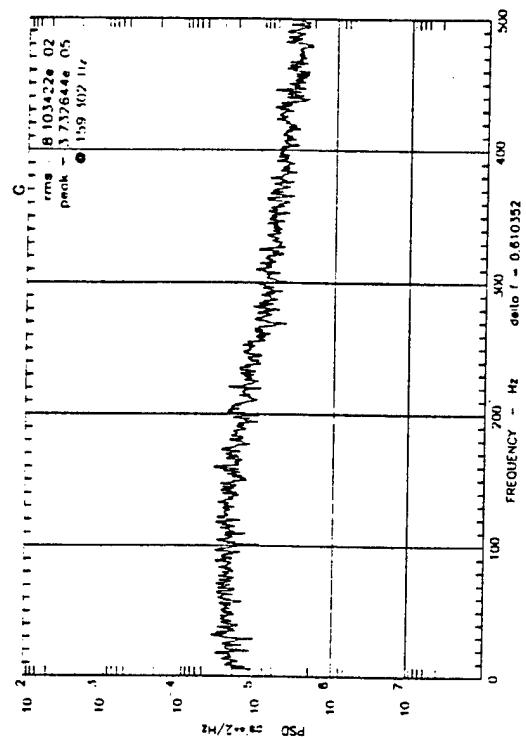
F 15 TPN 2928:  $\alpha=32$   $\beta=4$   $\beta=0$



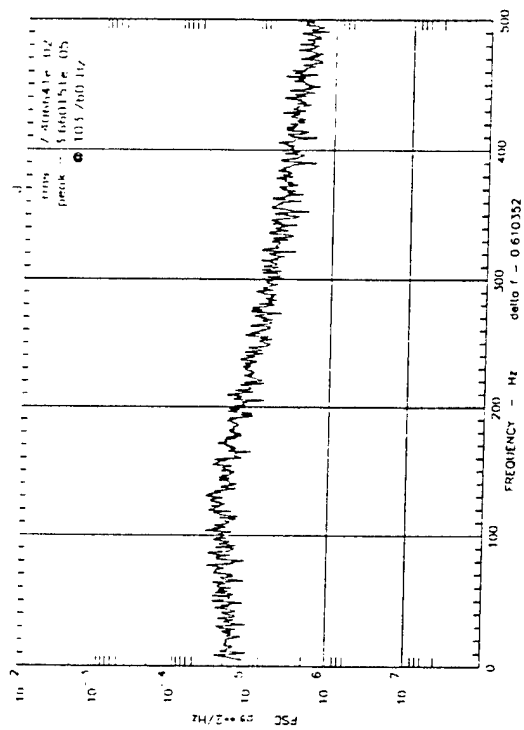
F 15 TPN 2928:  $\alpha=32$   $\beta=4$   $\beta=0$



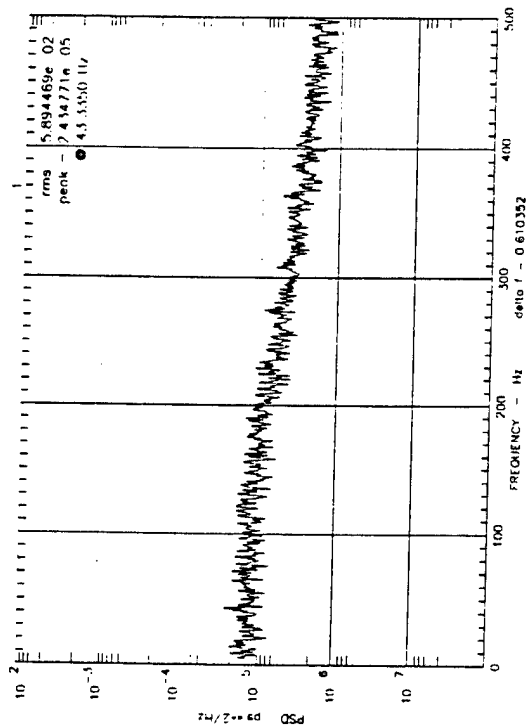
F 15 TPN 2928:  $\alpha=32$   $\beta=4$   $\beta=0$



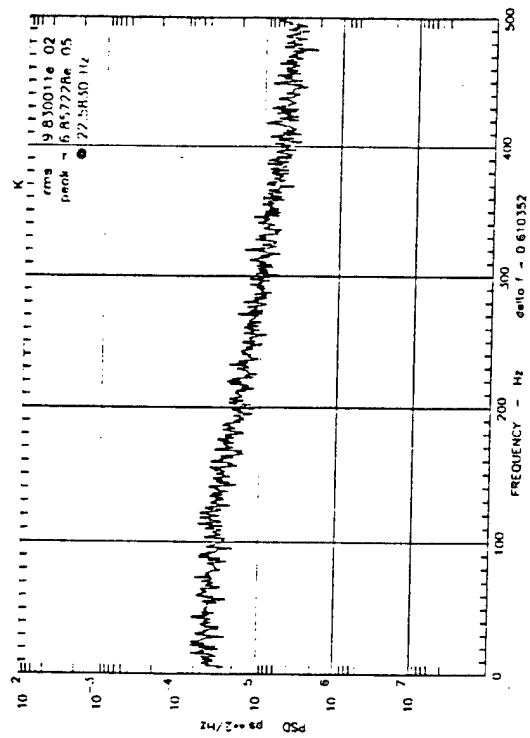
F 15 TPN 2928: alpha=32 beta=4 bp=0



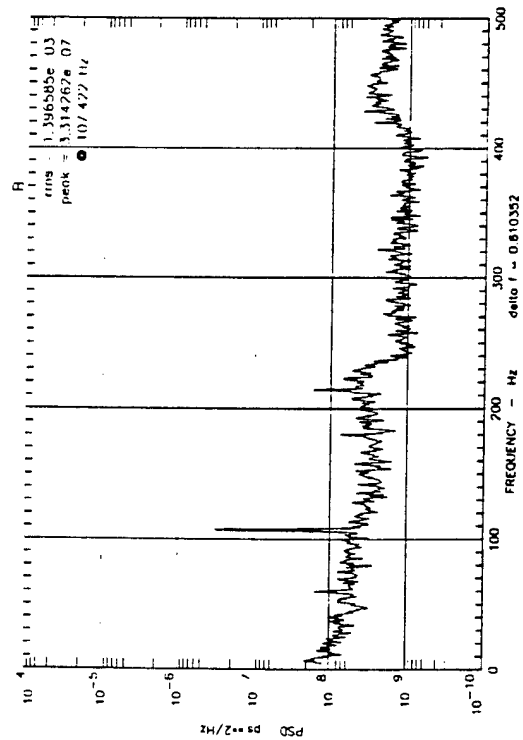
F 15 TPN 2928: alpha=32 beta=4 bp=0



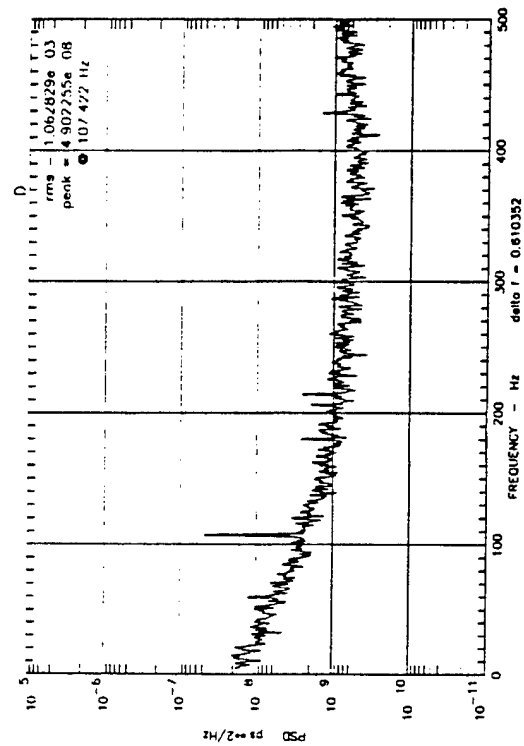
F 15 TPN 2928: alpha=32 beta=4 bp=0



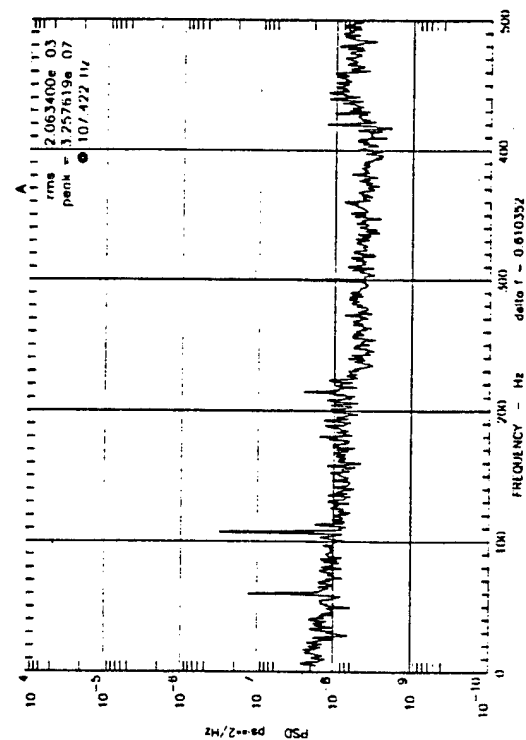
F 15 TPN 2844: alpha=8 beta=0 bp=0



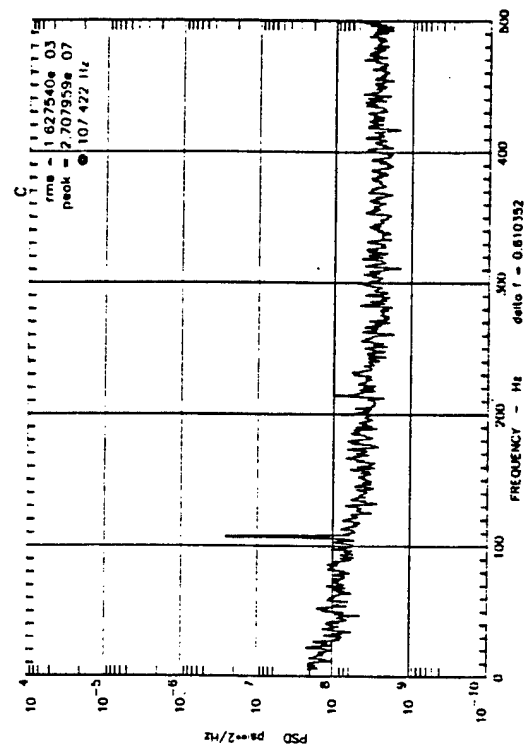
F 15 TPN 2844: alpha=8 beta=0 bp=0



F 15 TPN 2844: alpha=8 beta=0 bp=0

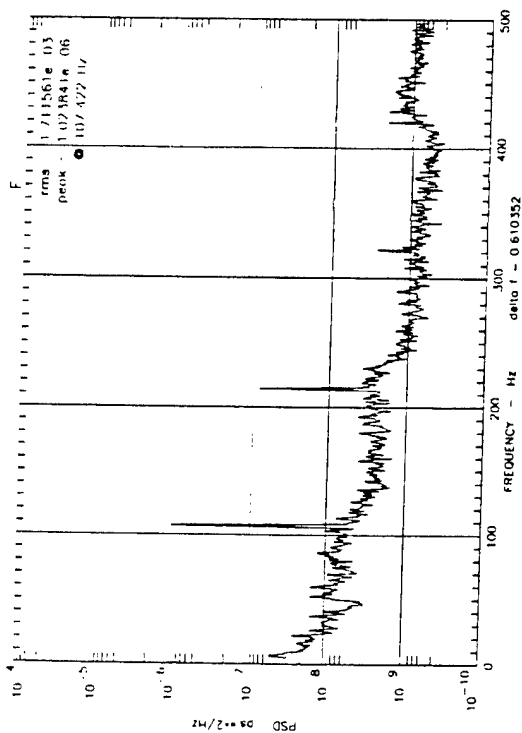


F 15 TPN 2844: alpha=8 beta=0 bp=0

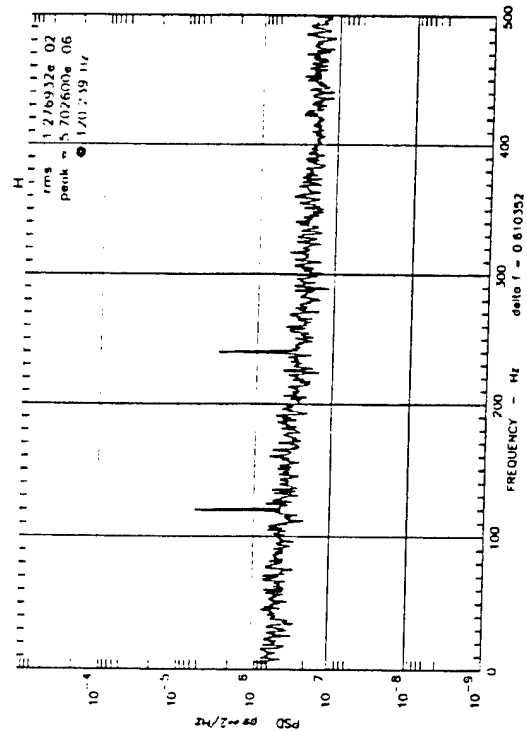




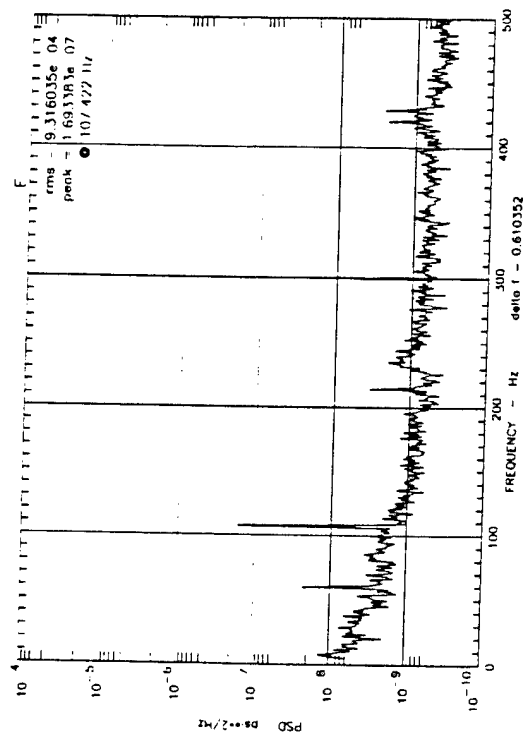
F 15 TPN 2844:  $\alpha=8$   $\beta=0$   $\text{bp}=0$



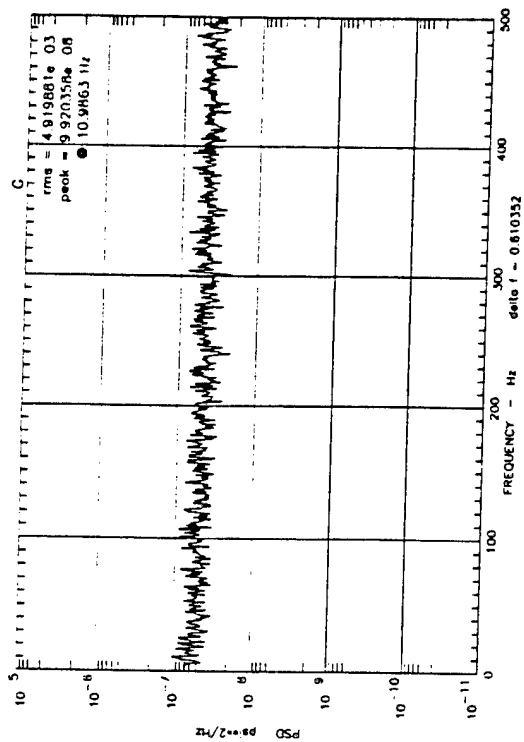
F 15 TPN 2844:  $\alpha=8$   $\beta=0$   $\text{bp}=0$

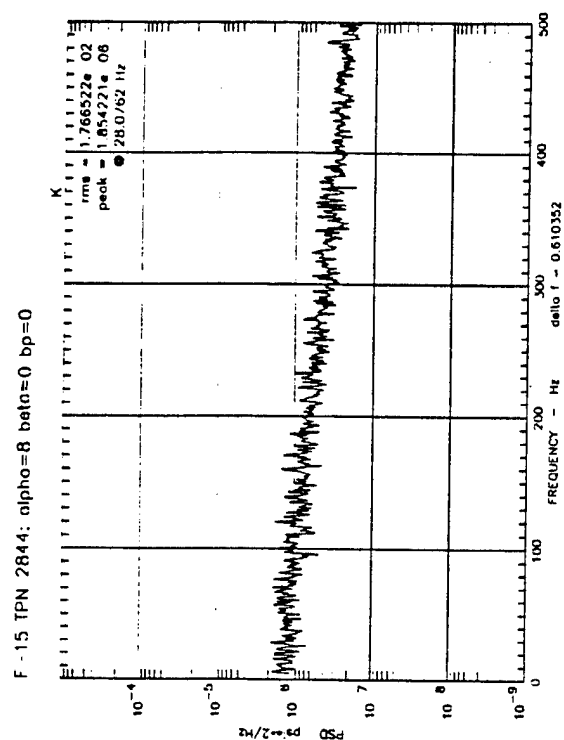
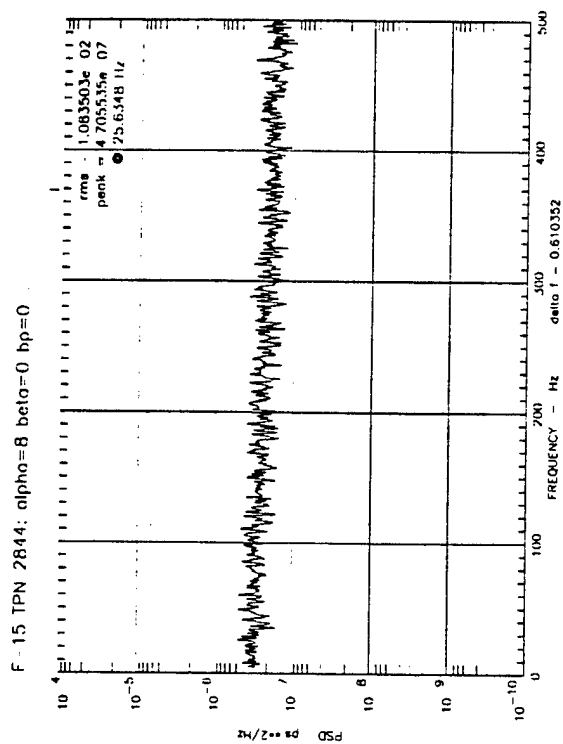
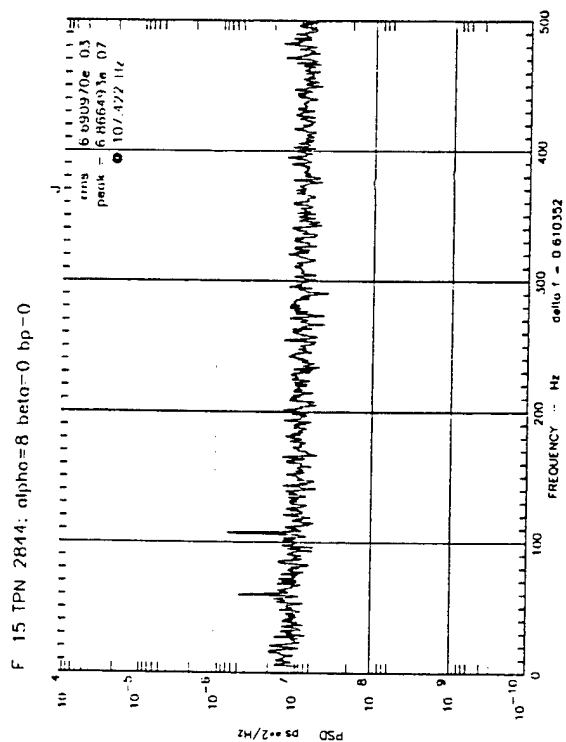


F 15 TPN 2844:  $\alpha=8$   $\beta=0$   $\text{bp}=0$

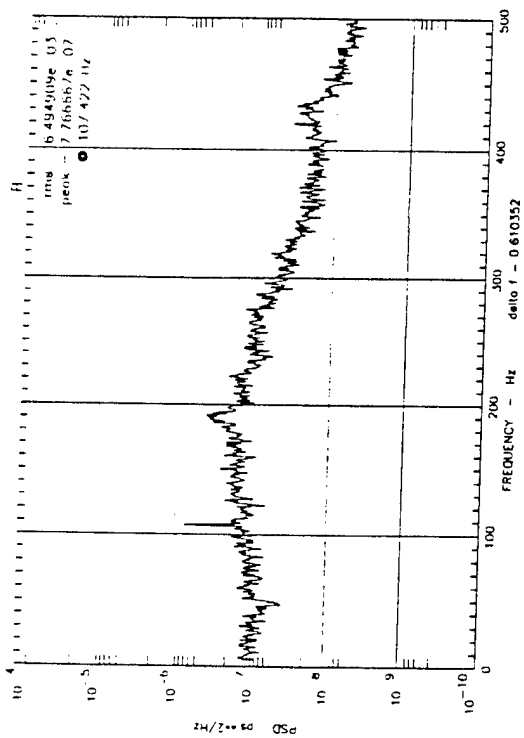


F 15 TPN 2844:  $\alpha=8$   $\beta=0$   $\text{bp}=0$

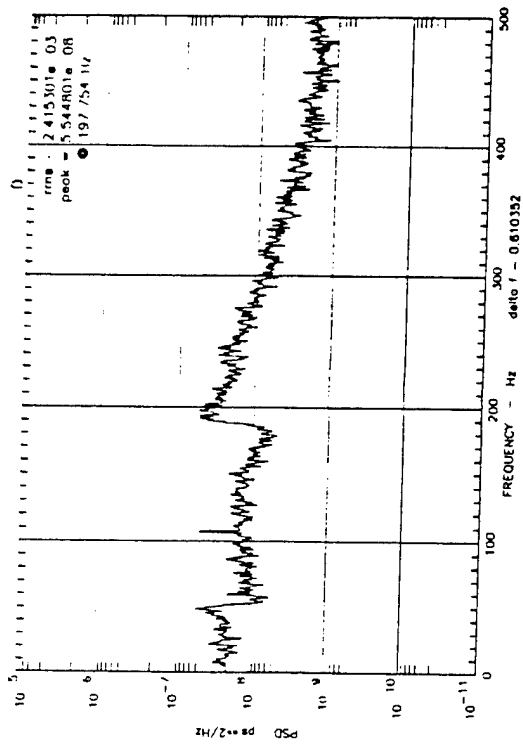




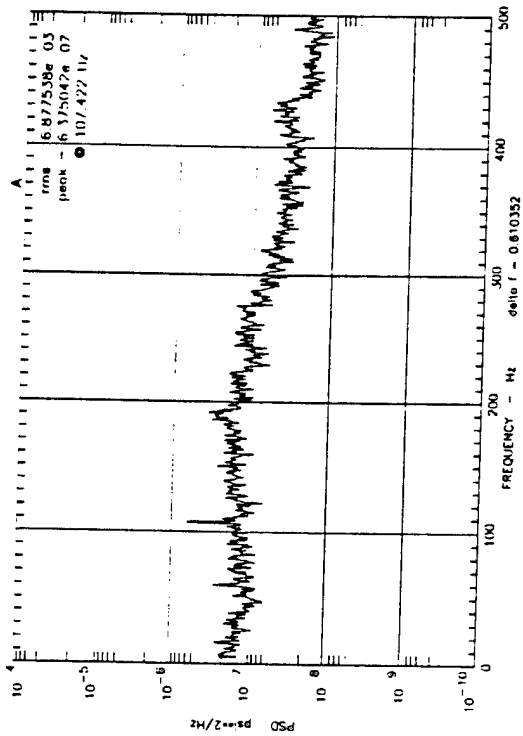
F 15 TPN 2848: alpha=16 beta=0 bp=0



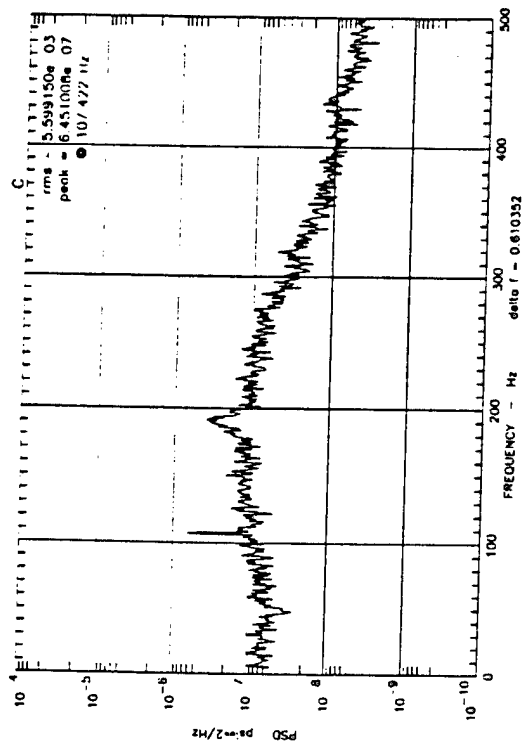
F 15 TPN 2848: alpha=16 beta=0 bp=0



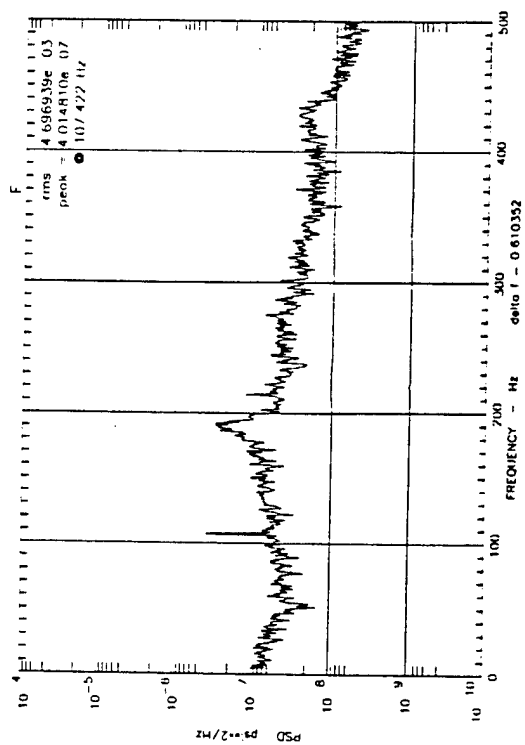
F 15 TPN 2848: alpha=16 beta=0 bp=0



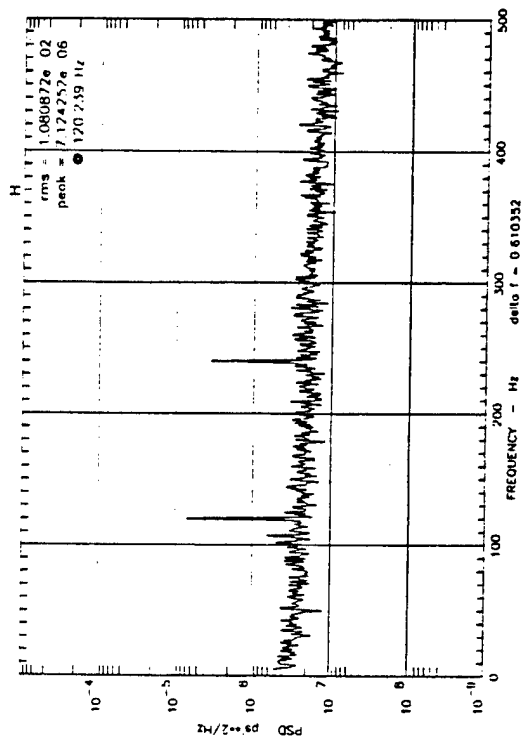
F 15 TPN 2848: alpha=16 beta=0 bp=0



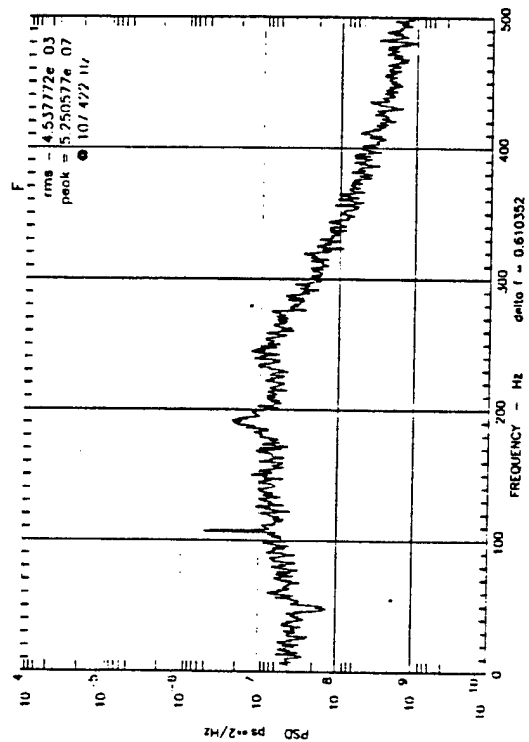
F 15 TPN 2848: alpha=16 beta=0 bp=0



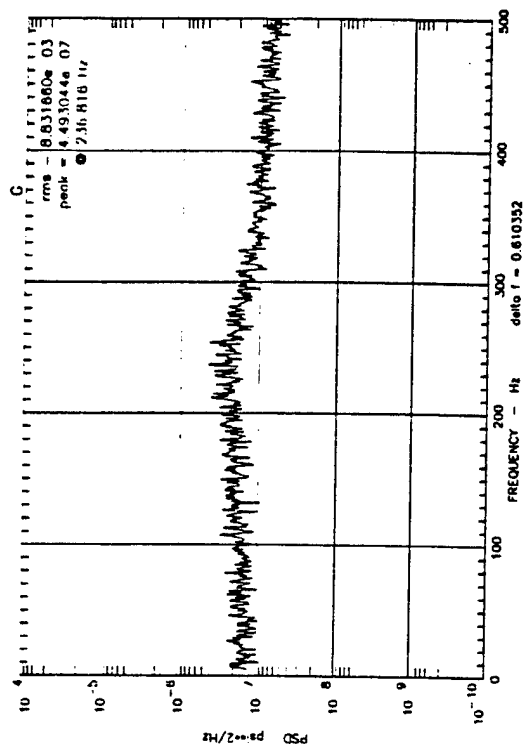
F 15 TPN 2848: alpha=16 beta=0 bp=0



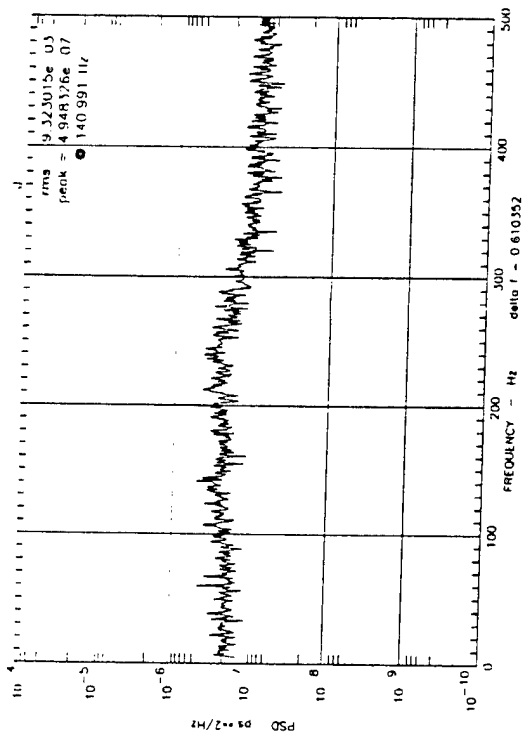
F 15 TPN 2848: alpha=16 beta=0 bp=0



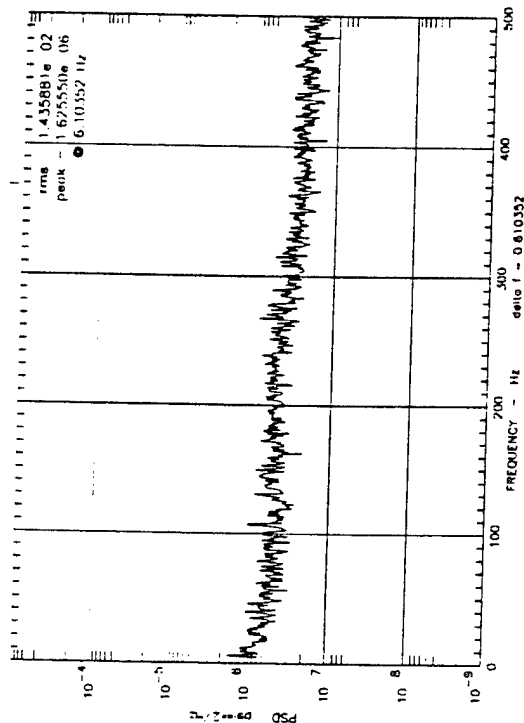
F 15 TPN 2848: alpha=16 beta=0 bp=0



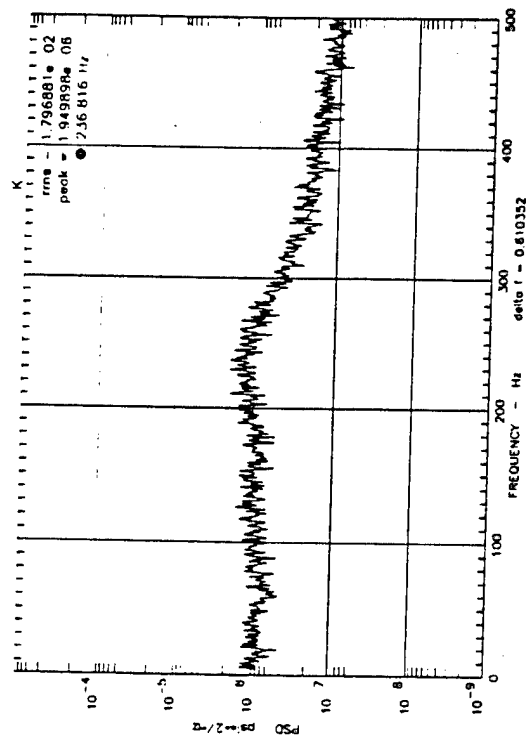
F 15 TPN 2848: alpha=16 beta=0 bp=0



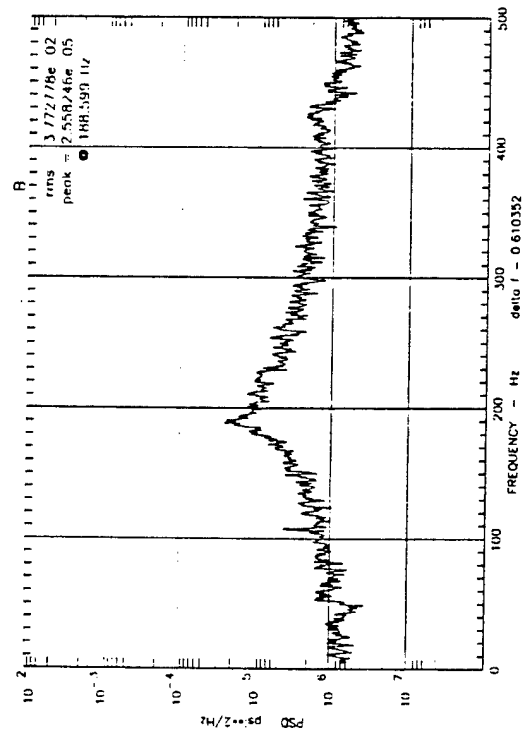
F 15 TPN 2848: alpha=16 beta=0 bp=0



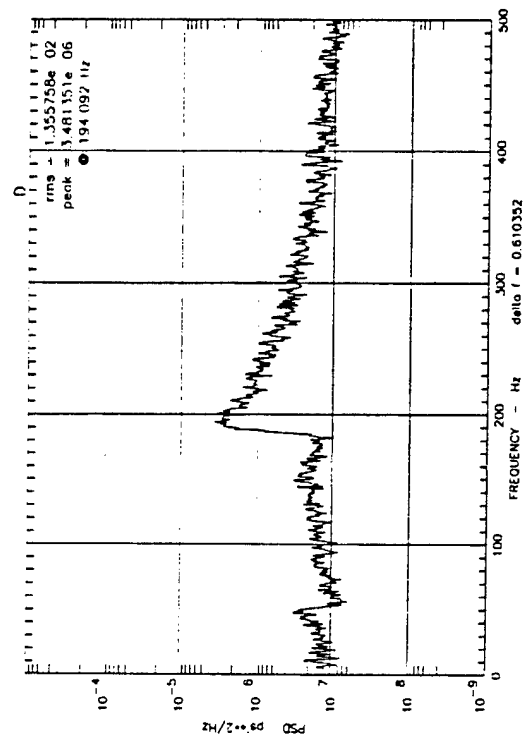
F 15 TPN 2848: alpha=16 beta=0 bp=0



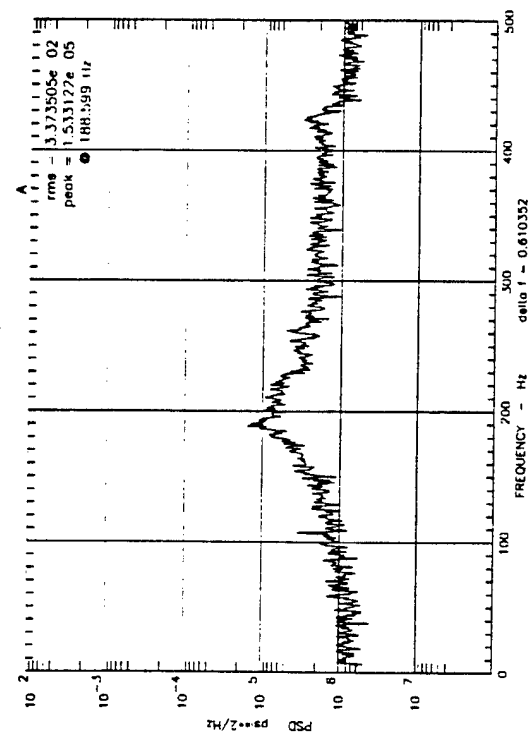
F 15 TPN 2850: alpha=20 beta=0 bp=0



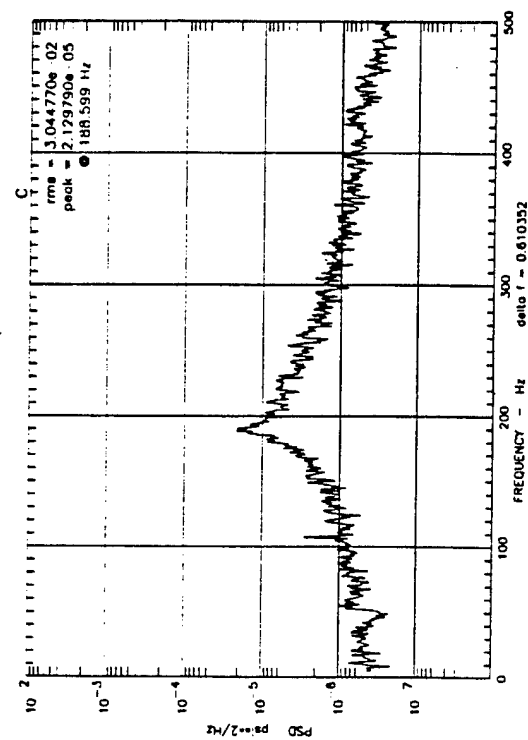
F 15 TPN 2850: alpha=20 beta=0 bp=0



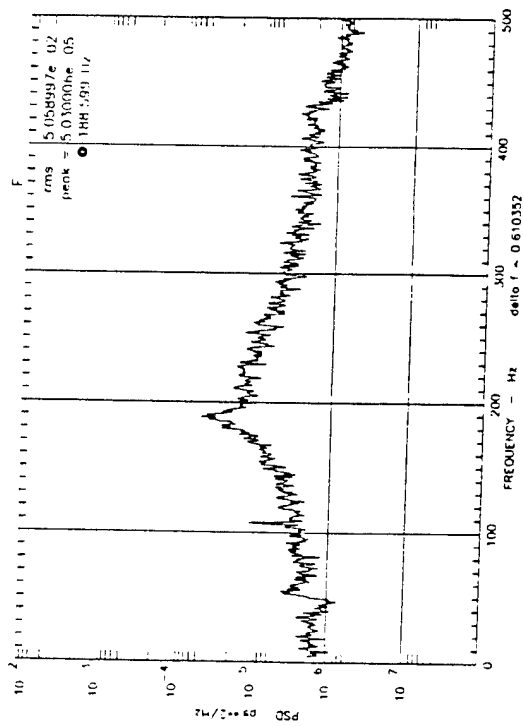
F 15 TPN 2850: alpha=20 beta=0 bp=0



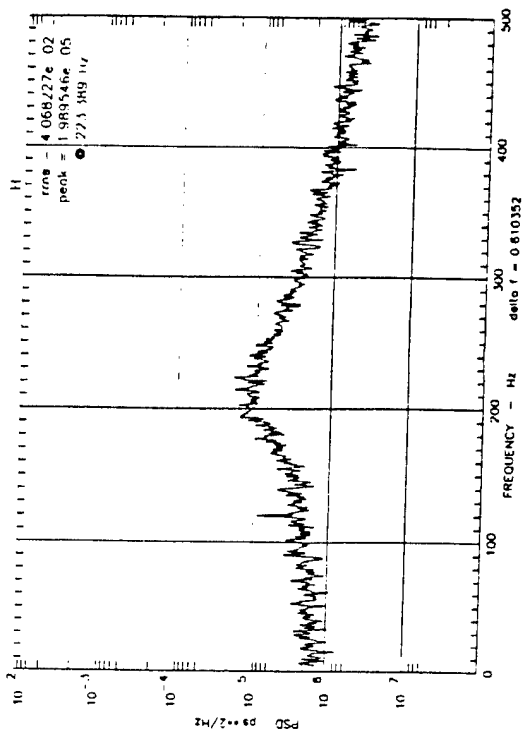
F 15 TPN 2850: alpha=20 beta=0 bp=0



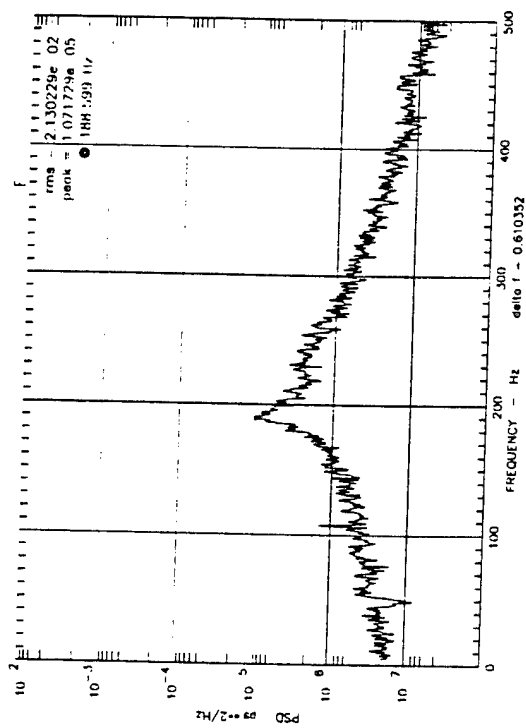
F 15 TPN 2850: alpha=20 beta=0 bp=0



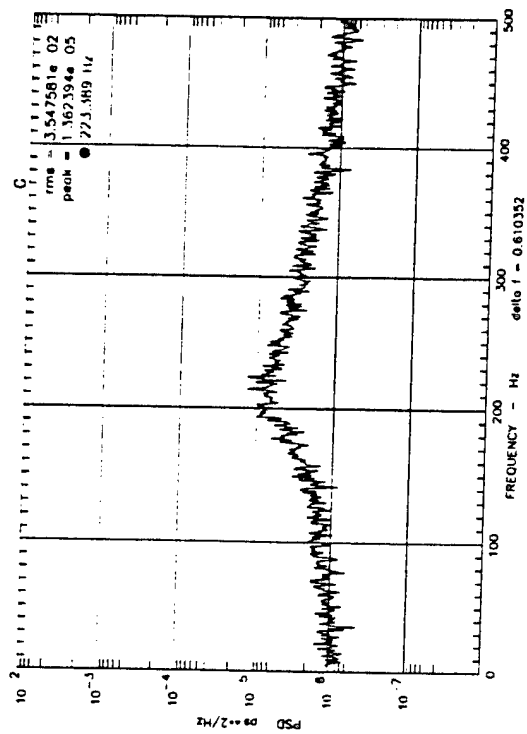
F 15 TPN 2850: alpha=20 beta=0 bp=0



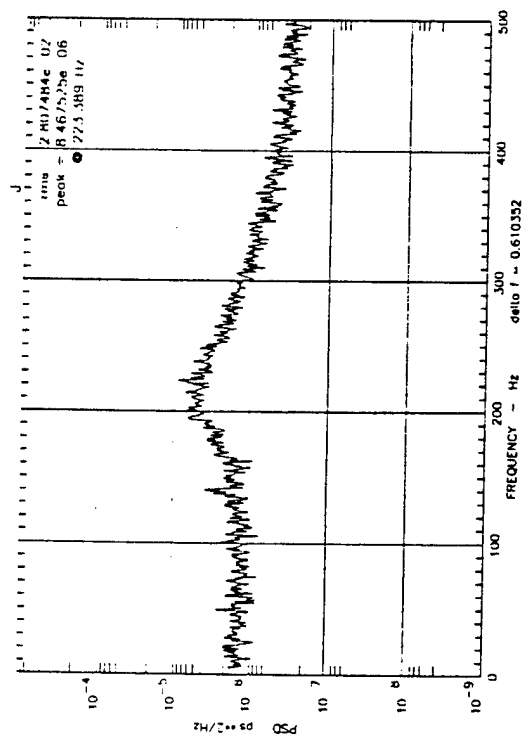
F 15 TPN 2850: alpha=20 beta=0 bp=0



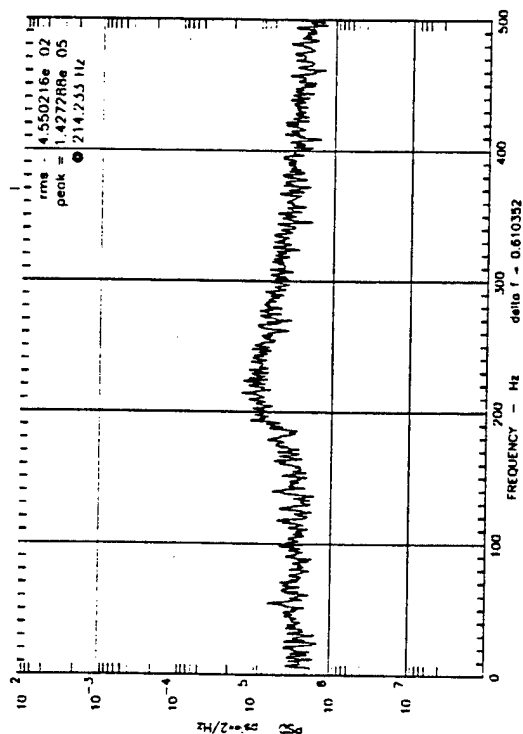
F 15 TPN 2850: alpha=20 beta=0 bp=0



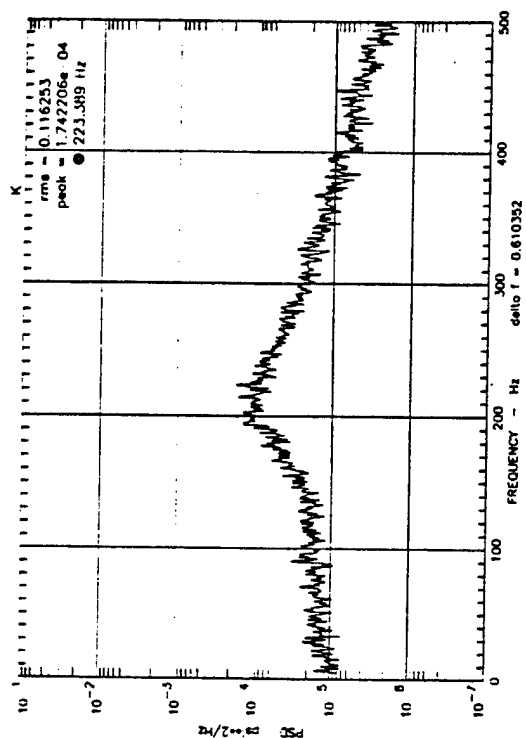
F 15 TPN 2850: alpha=20 beta=0 bp=0



F 15 TPN 2850: alpha=20 beta=0 bp=0

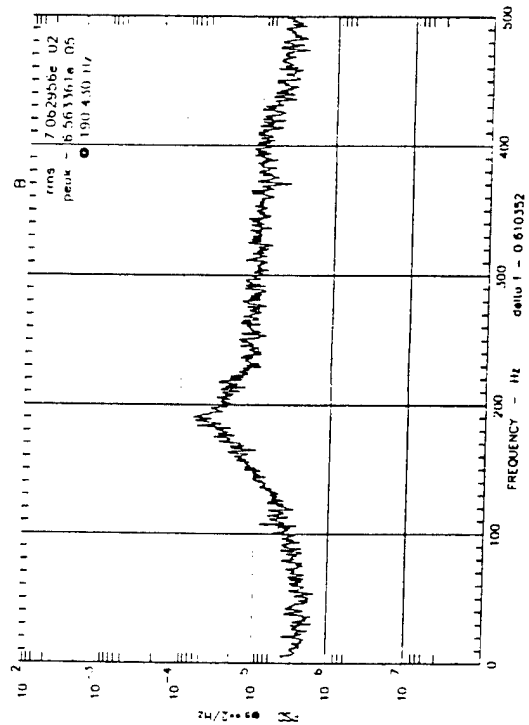


F 15 TPN 2850: alpha=20 beta=0 bp=0

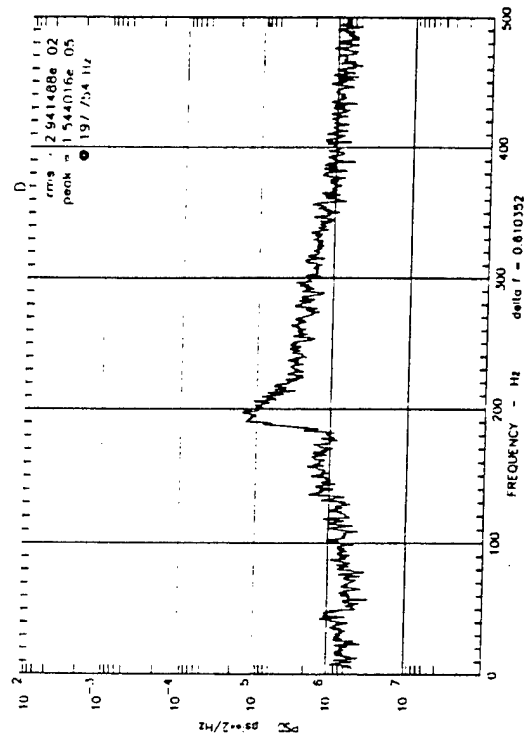




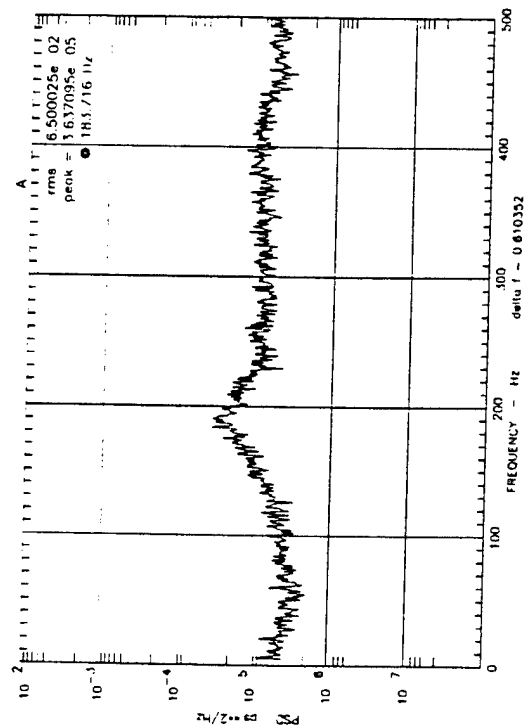
F 15 TPN 2852: alpha=24 beta=0 bp=0



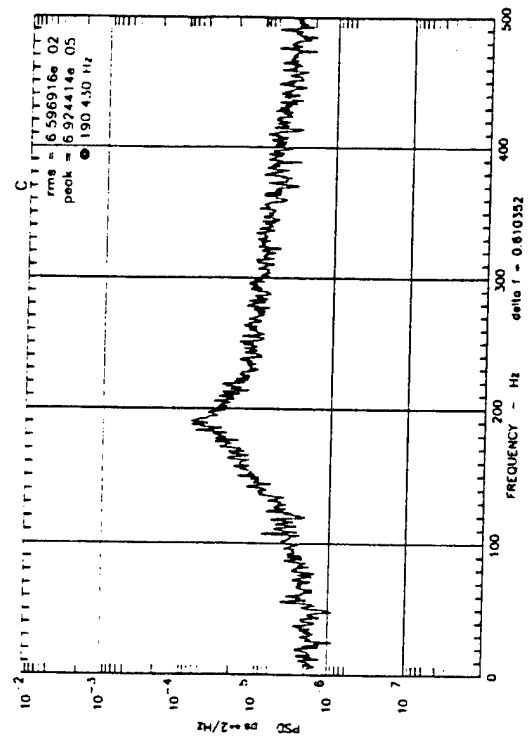
F 15 TPN 2852: alpha=24 beta=0 bp=0



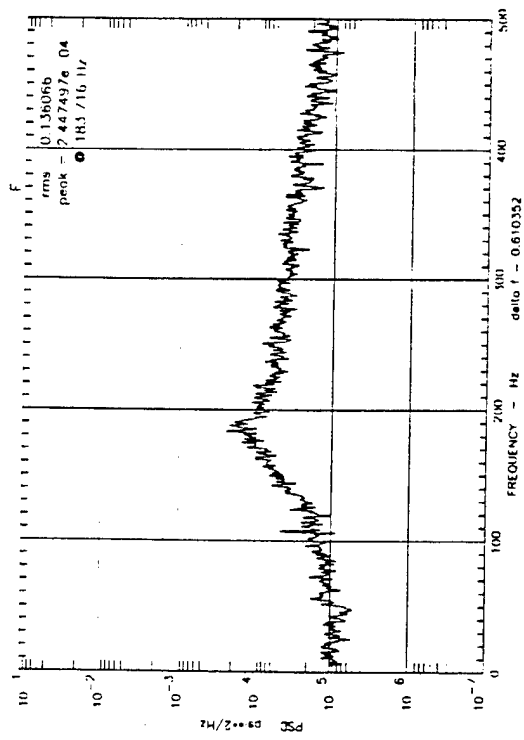
F 15 TPN 2852: alpha=24 beta=0 bp=0



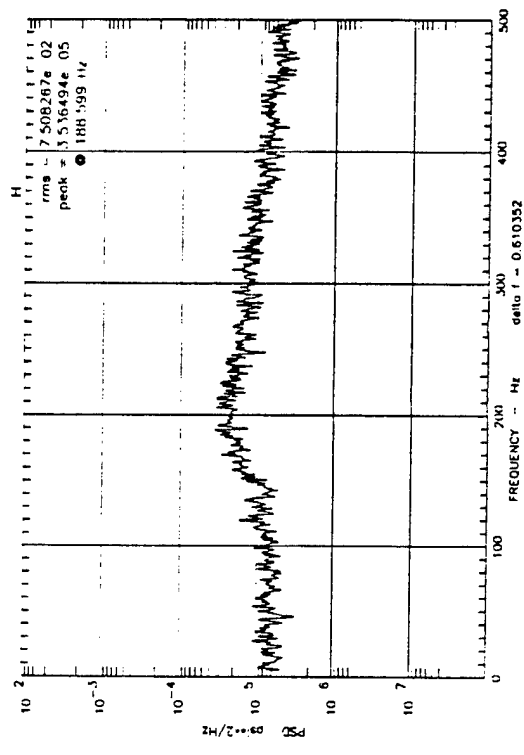
F 15 TPN 2852: alpha=24 beta=0 bp=0



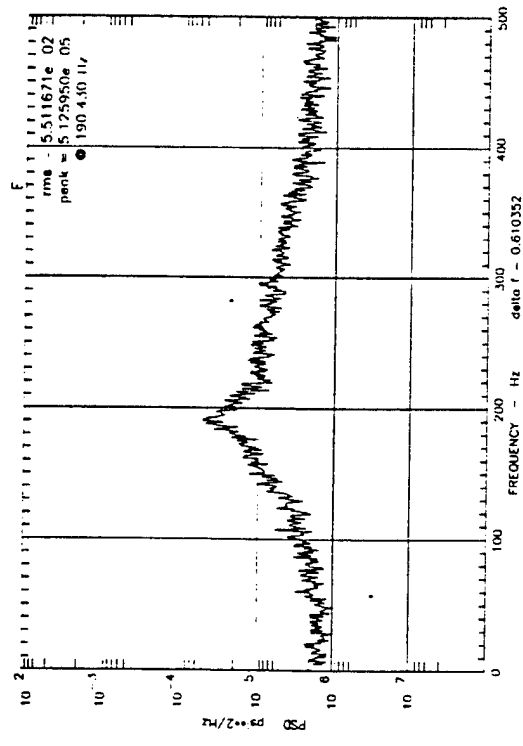
F 15 TPN 2852: alpha=24 beta=0 bp=0



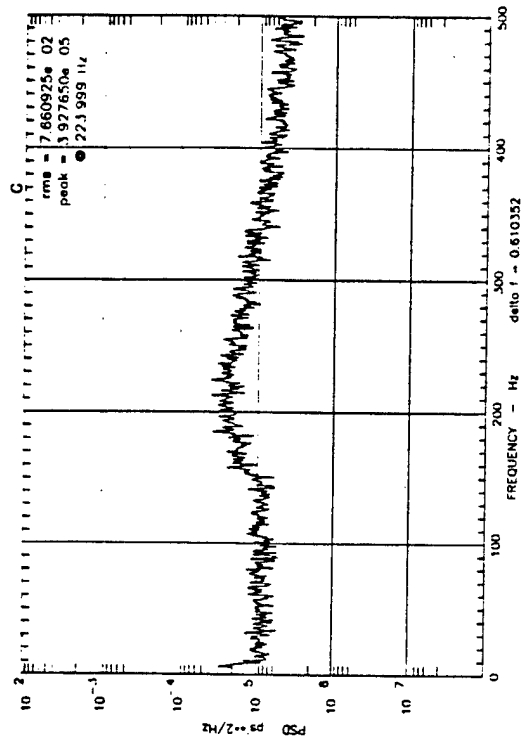
F 15 TPN 2852: alpha=24 beta=0 bp=0



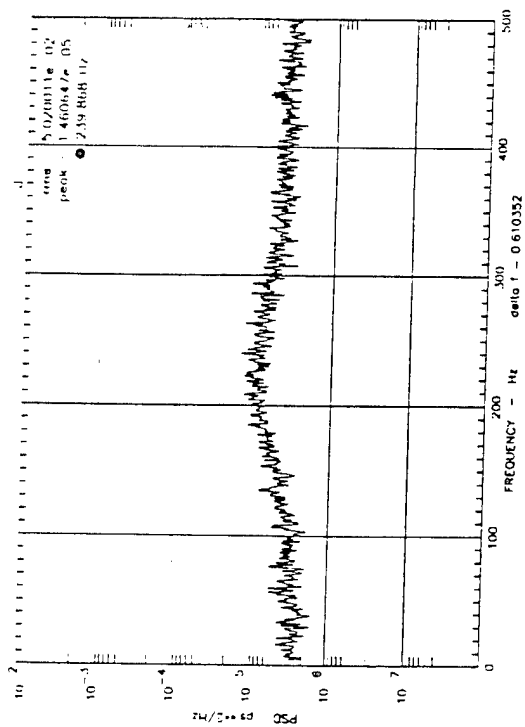
F 15 TPN 2852: alpha=24 beta=0 bp=0



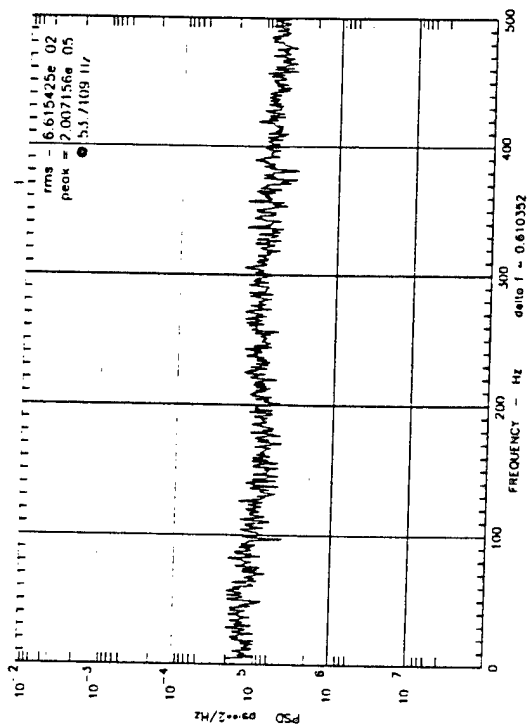
F 15 TPN 2852: alpha=24 beta=0 bp=0



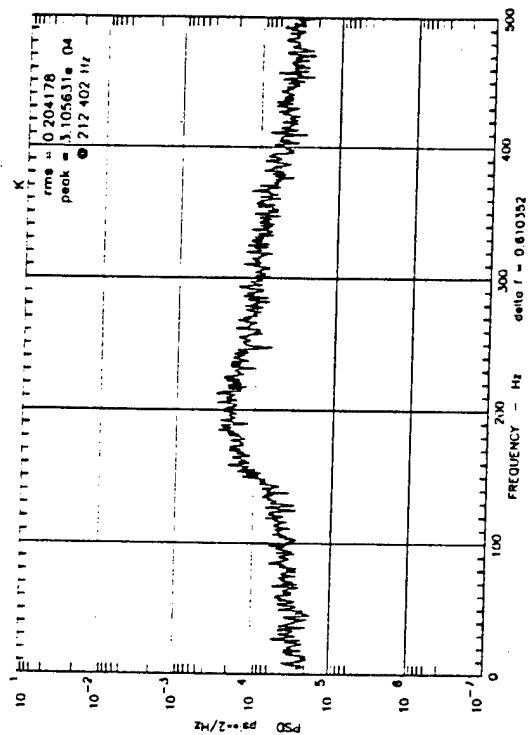
F 15 TPN 2852: alpha=24 beta=0 bp=0



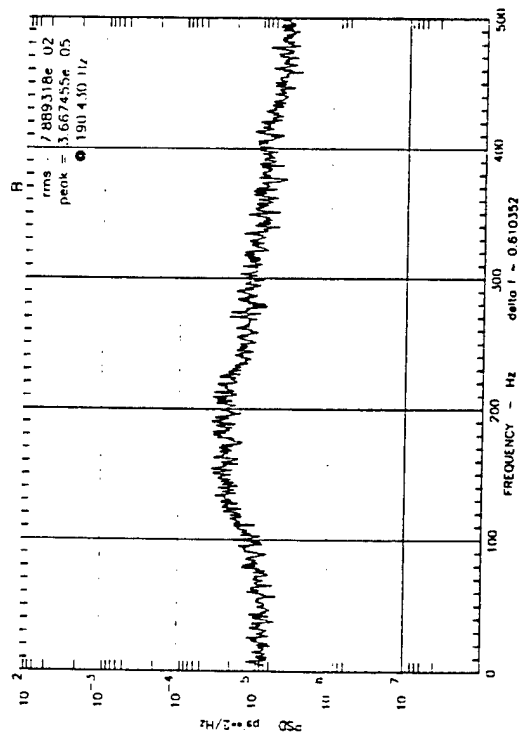
F 15 TPN 2852: alpha=24 beta=0 bp=0



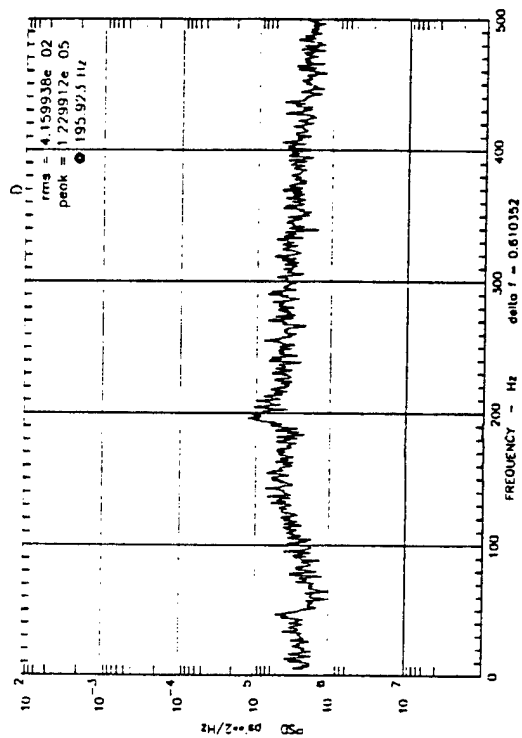
F 15 TPN 2852: alpha=24 beta=0 bp=0



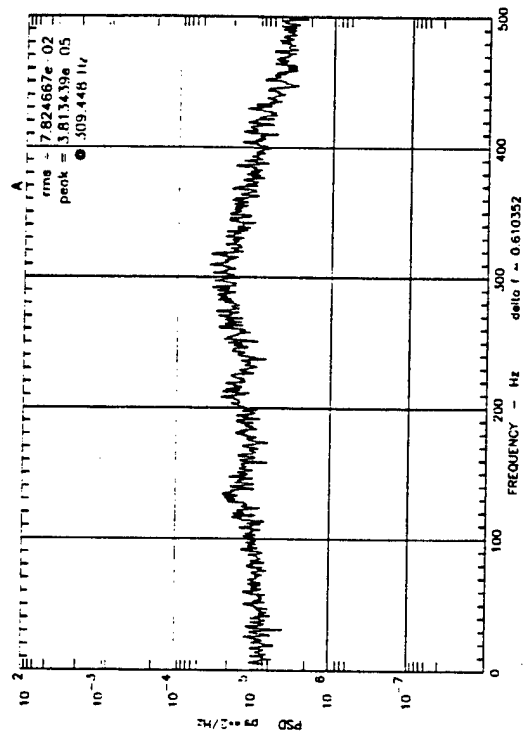
F 15 TPN 2853:  $\alpha=28$   $\beta=0$   $\text{bp}=0$



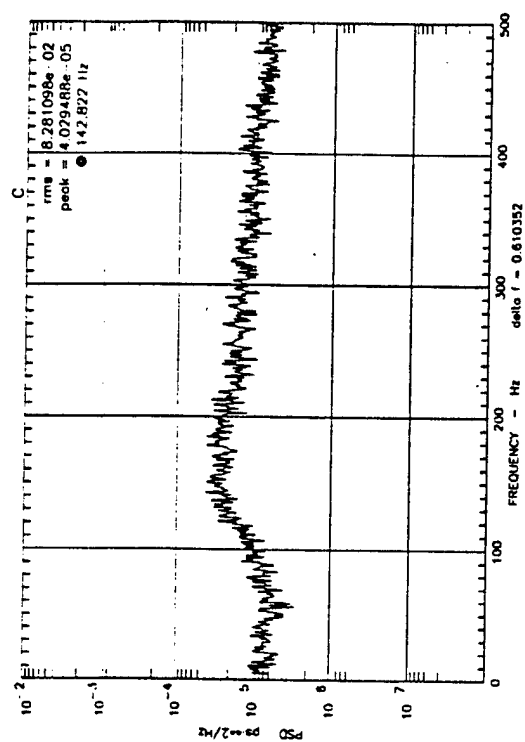
F 15 TPN 2853:  $\alpha=28$   $\beta=0$   $\text{bp}=0$



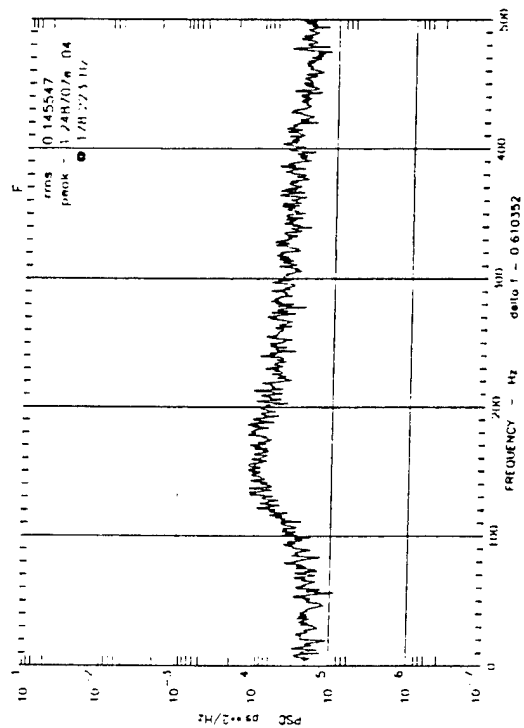
F 15 TPN 2853:  $\alpha=28$   $\beta=0$   $\text{bp}=0$



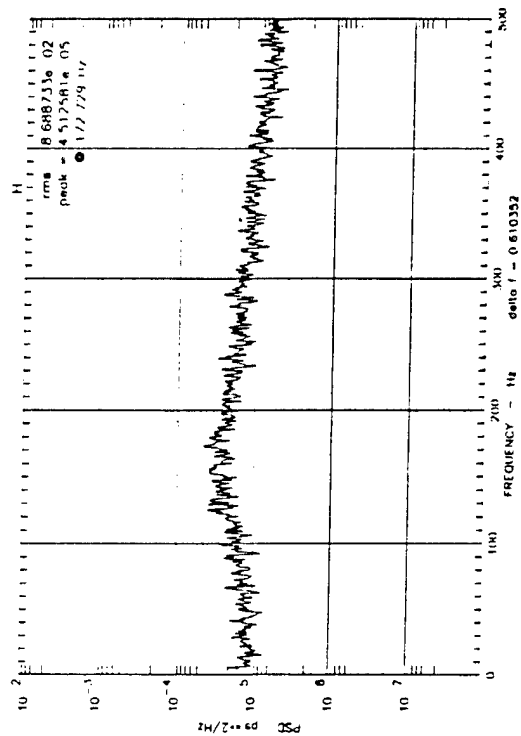
F 15 TPN 2853:  $\alpha=28$   $\beta=0$   $\text{bp}=0$



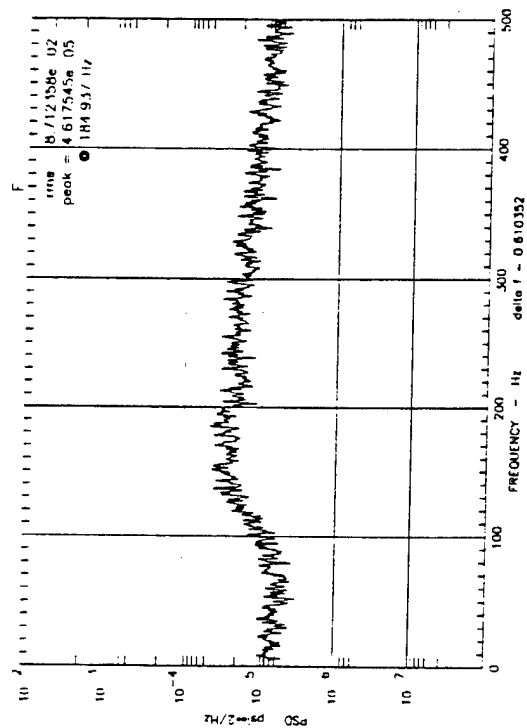
F 15 IPN 2853: alpha=28 beta=0 bp=0



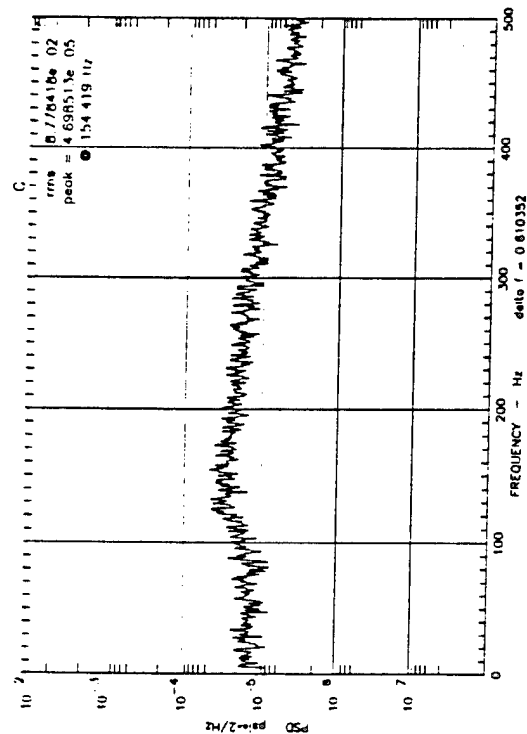
F 15 IPN 2853: alpha=28 beta=0 bp=0



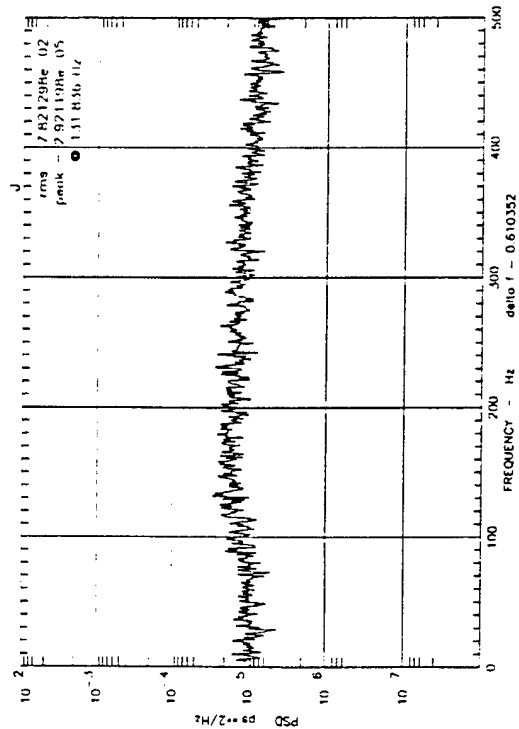
F 15 IPN 2853: alpha=28 beta=0 bp=0



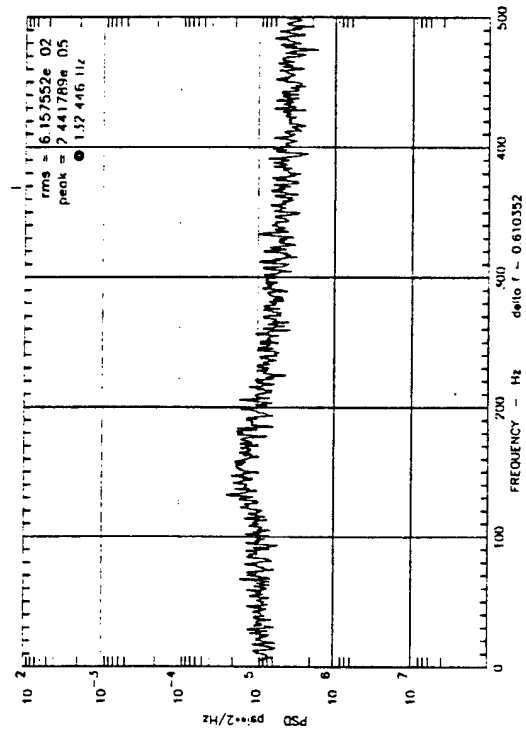
F 15 IPN 2853: alpha=28 beta=0 bp=0



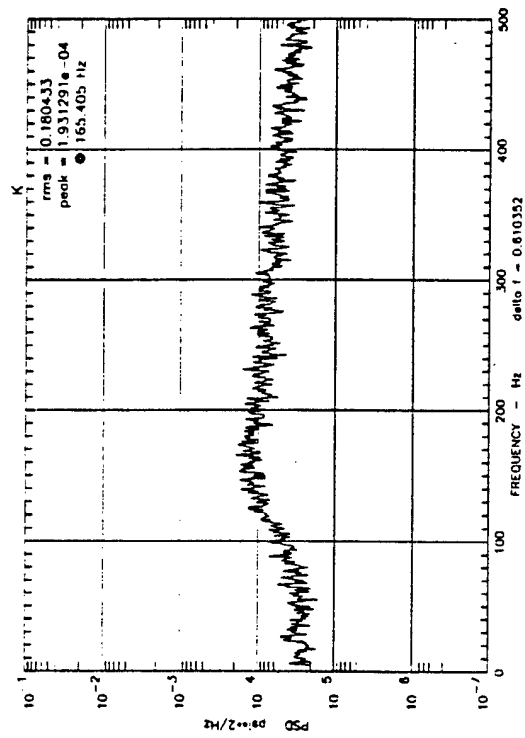
F 15 TPN 2853:  $\alpha=28$   $\beta=0$   $\text{bp}=0$



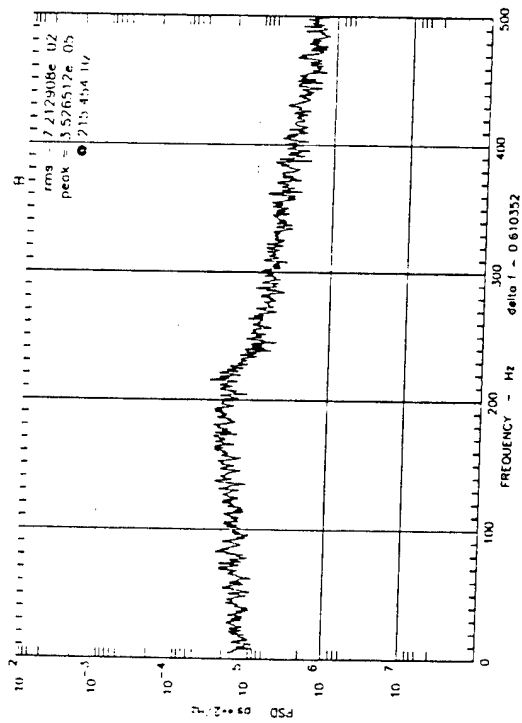
F 15 TPN 2853:  $\alpha=28$   $\beta=0$   $\text{bp}=0$



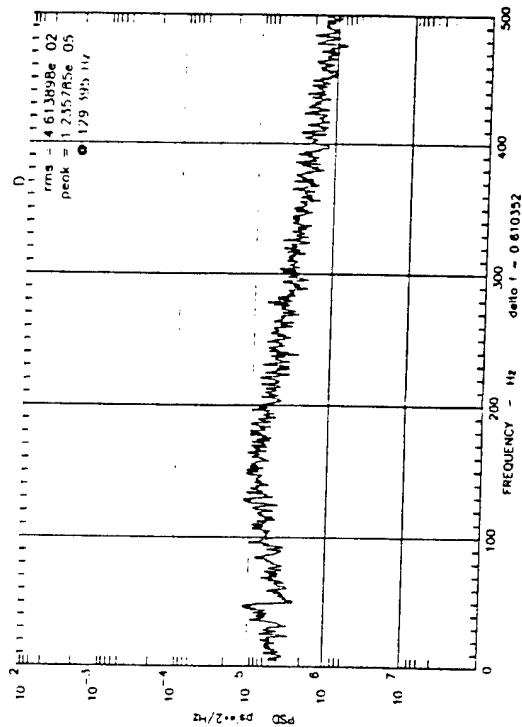
F 15 TPN 2853:  $\alpha=28$   $\beta=0$   $\text{bp}=0$



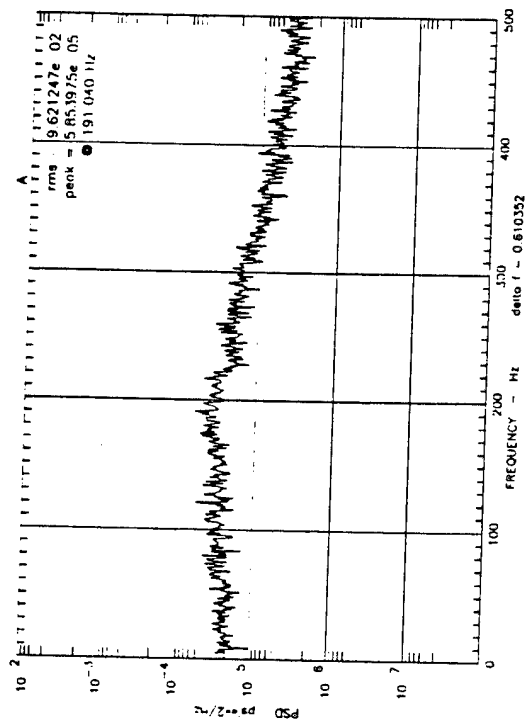
F 15 TPN 2854: alpha=32 beta=0 bp=0



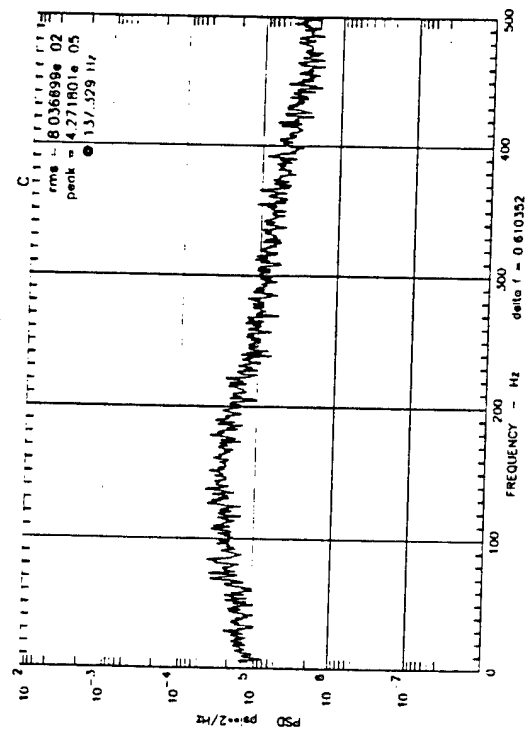
F 15 TPN 2854: alpha=32 beta=0 bp=0



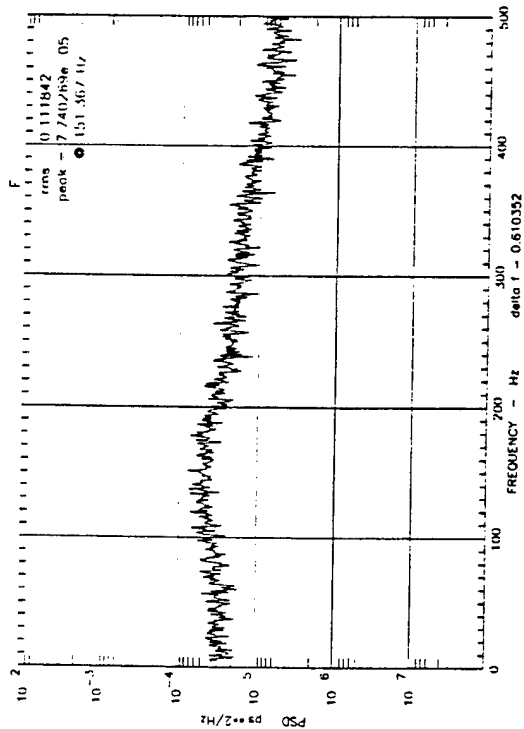
F 15 TPN 2854: alpha=32 beta=0 bp=0



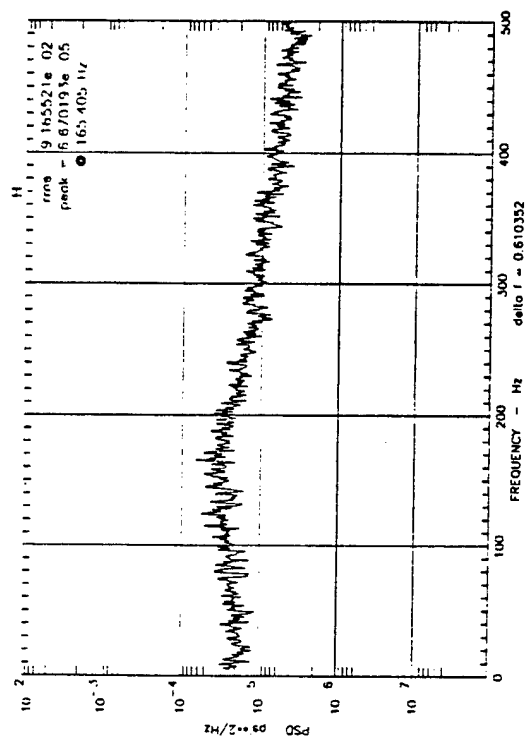
F 15 TPN 2854: alpha=32 beta=0 bp=0



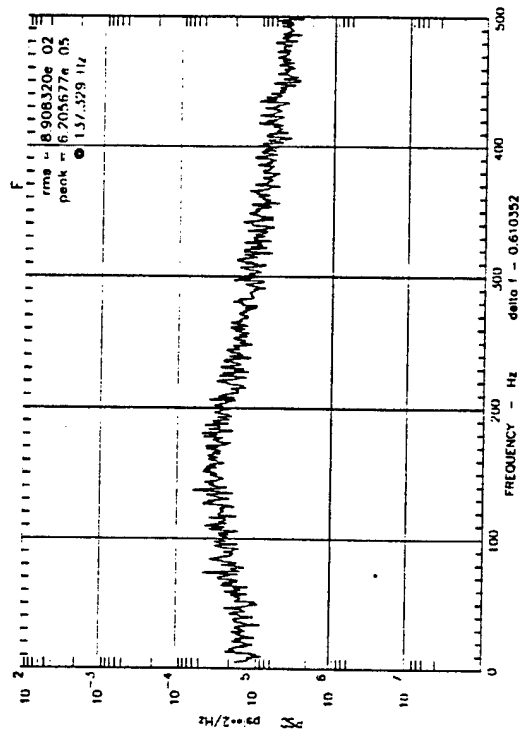
F 15 TPN 2854: alpha=32 beta=0 bp=0



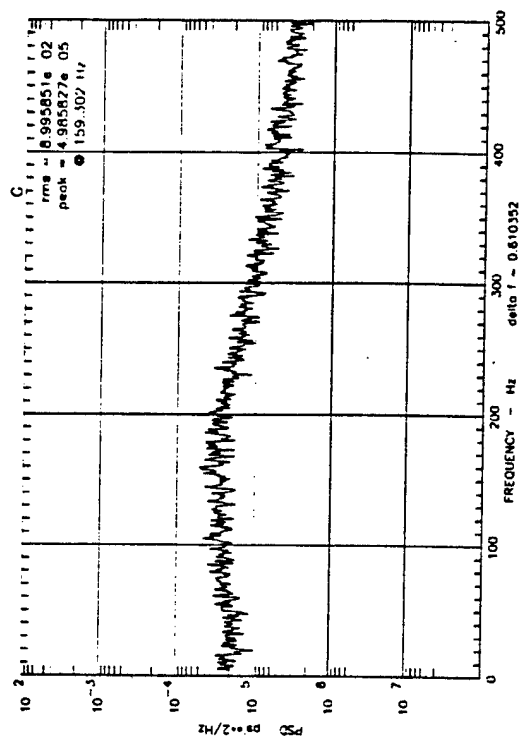
F 15 TPN 2854: alpha=32 beta=0 bp=0



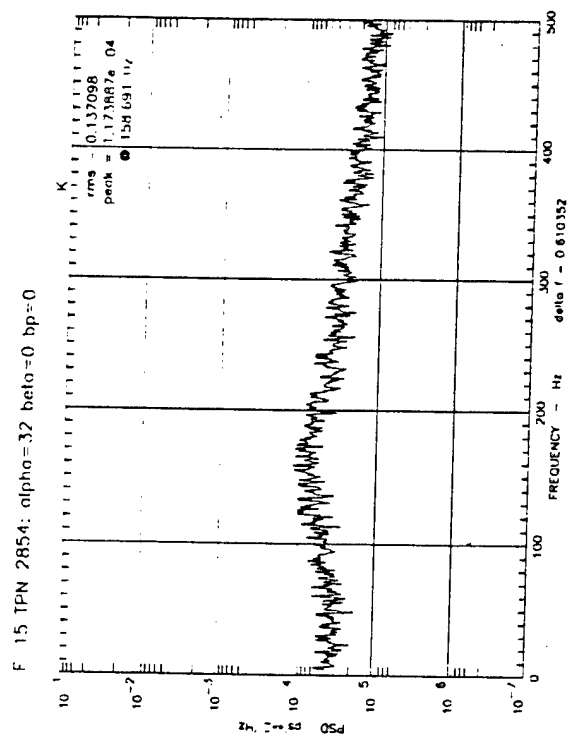
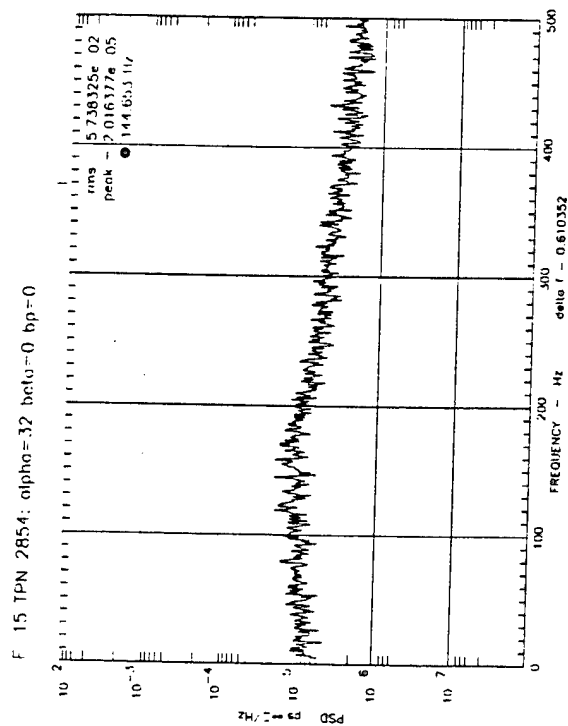
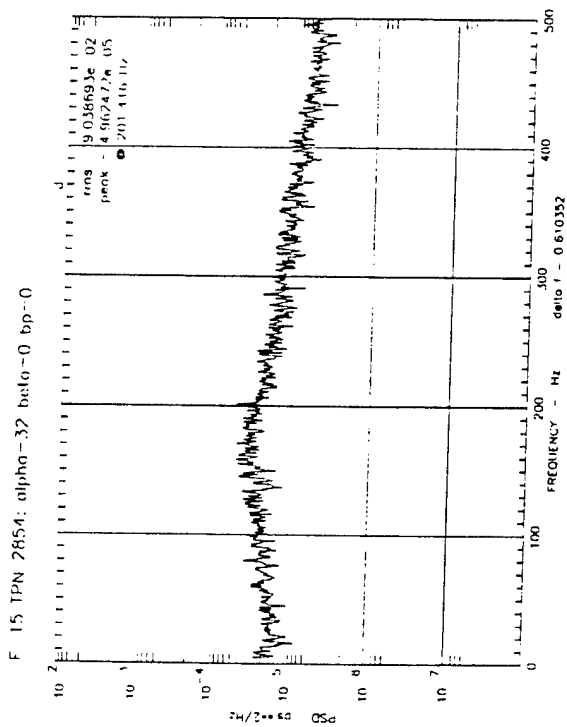
F 15 TPN 2854: alpha=32 beta=0 bp=0



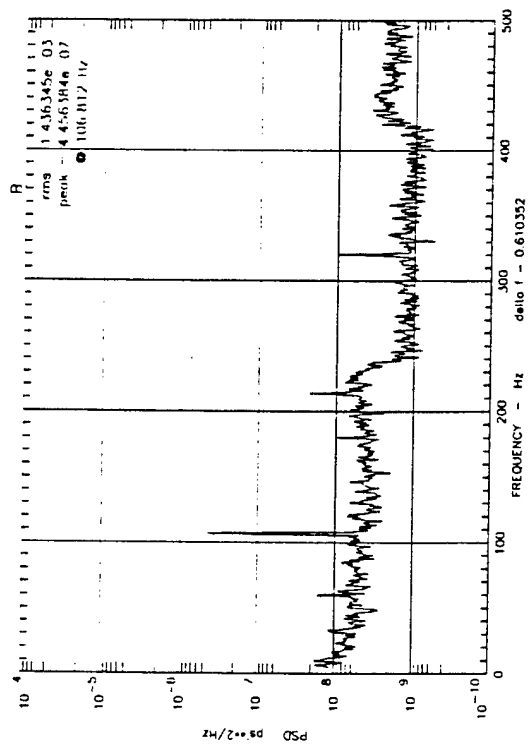
F 15 TPN 2854: alpha=32 beta=0 bp=0



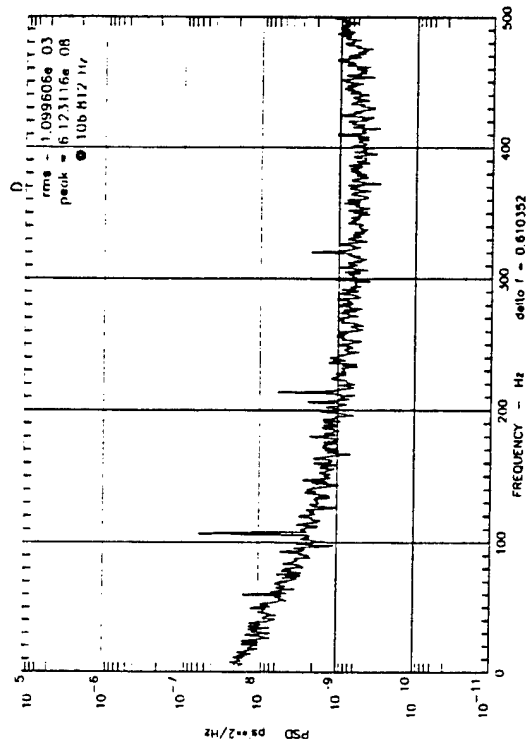




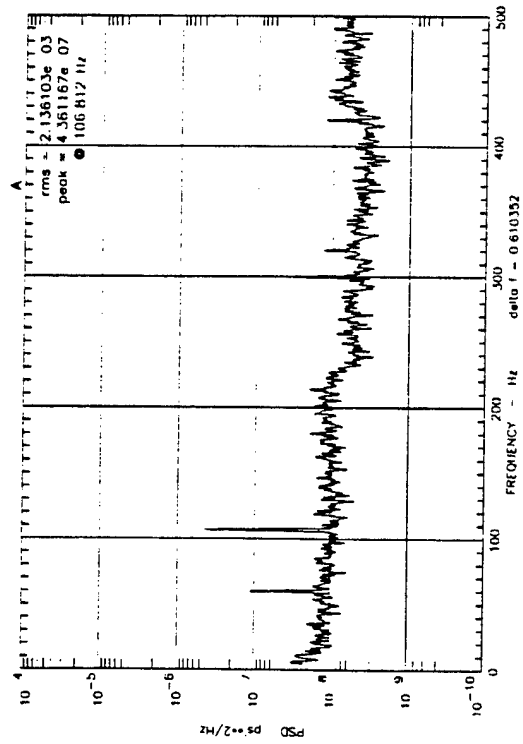
F 15 TPN 2864:  $\alpha=8$   $\beta=0$  4 bp=0



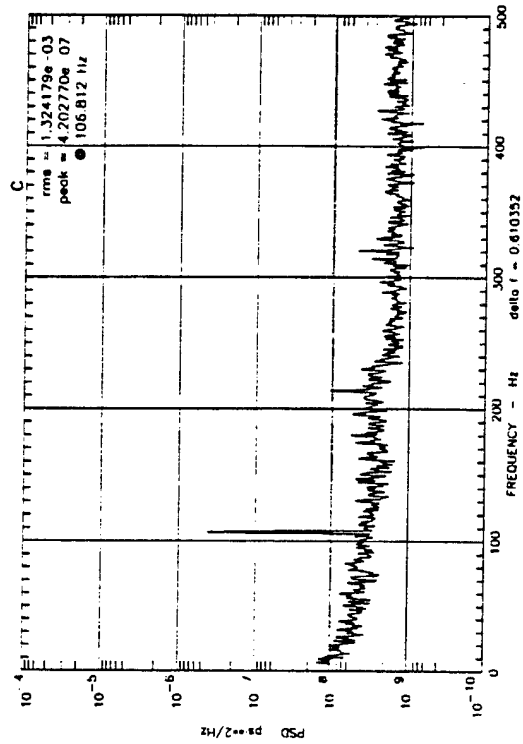
F 15 TPN 2864:  $\alpha=8$   $\beta=0$  4 bp=0



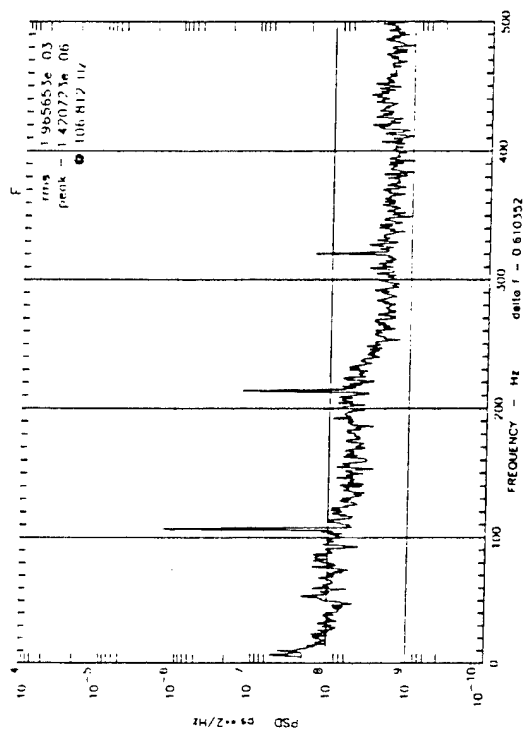
F 15 TPN 2864:  $\alpha=8$   $\beta=0$  4 bp=0



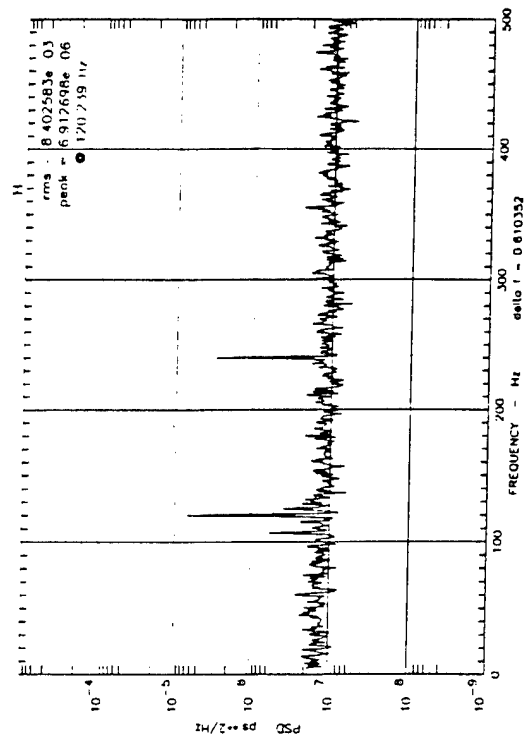
F 15 TPN 2864:  $\alpha=8$   $\beta=0$  4 bp=0



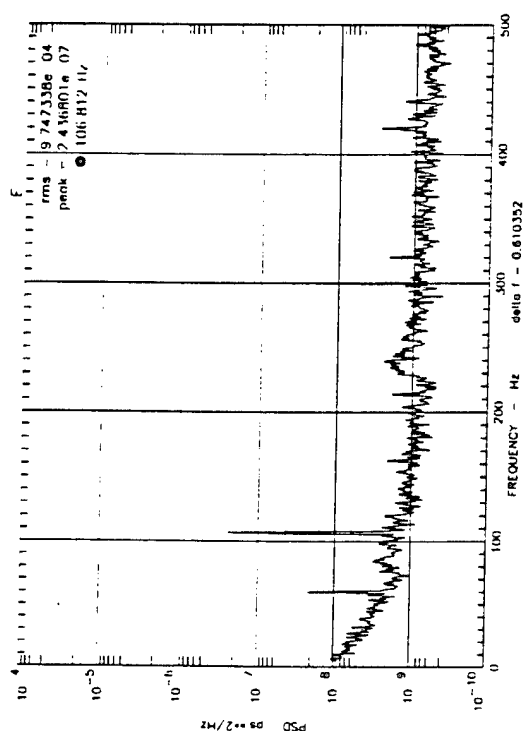
F 15 TPN 2864: alpha=8 beta=-4 bp=0



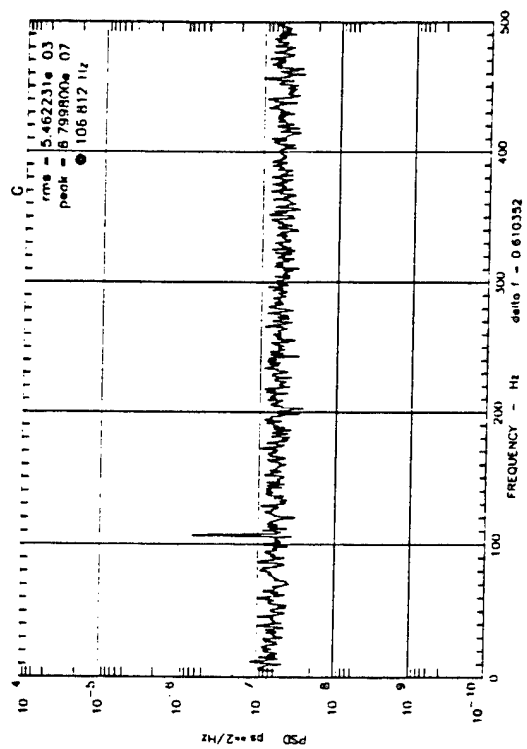
F 15 TPN 2864: alpha=8 beta=-4 bp=0



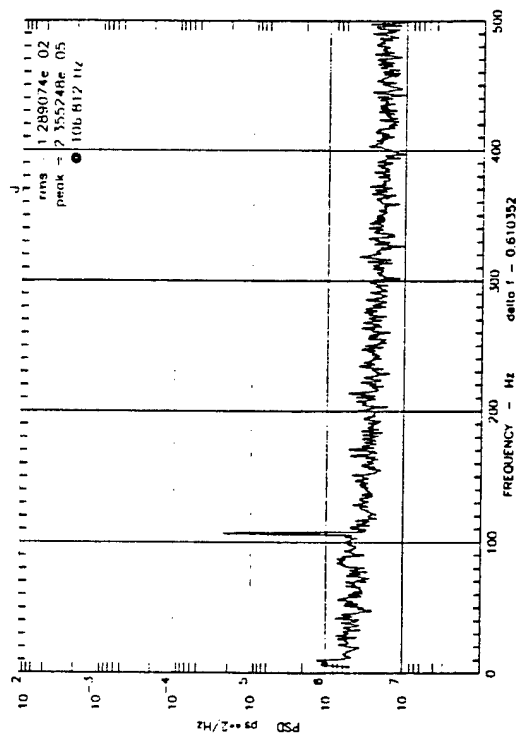
F 15 TPN 2864: alpha=8 beta=-4 bp=0



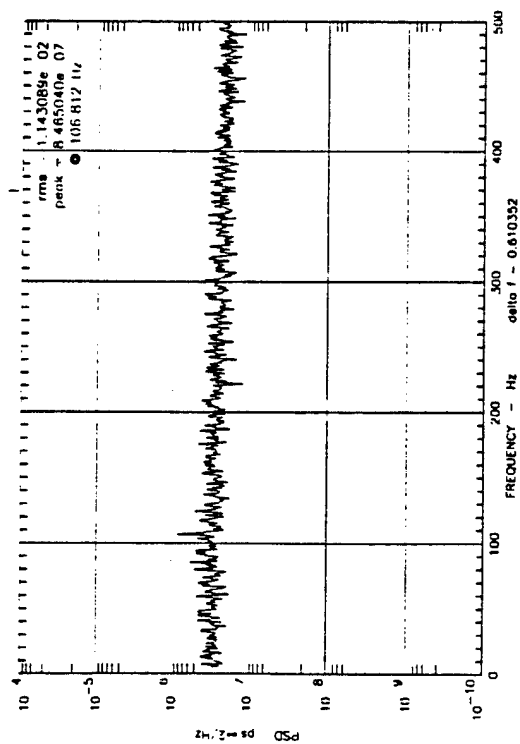
F 15 TPN 2864: alpha=8 beta=-4 bp=0



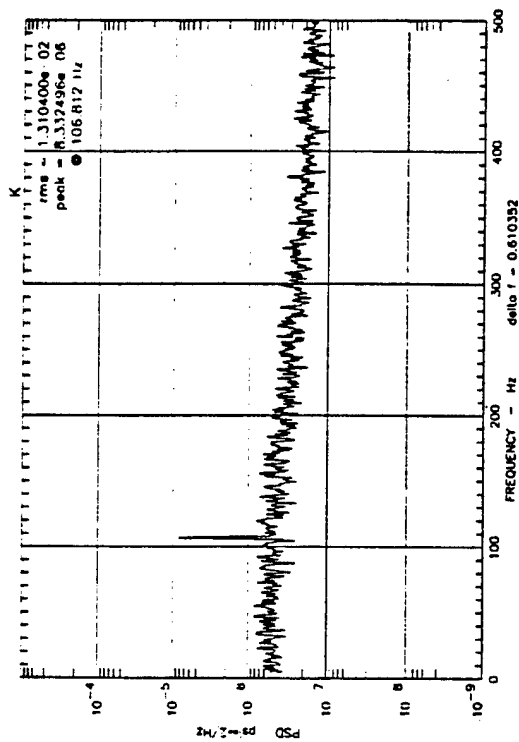
F 15 TPN 2864; alpha=8 beta= 4 bp=0

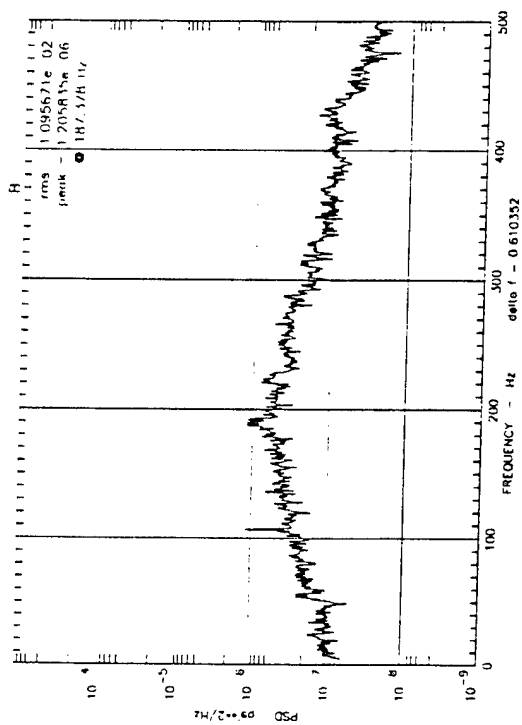
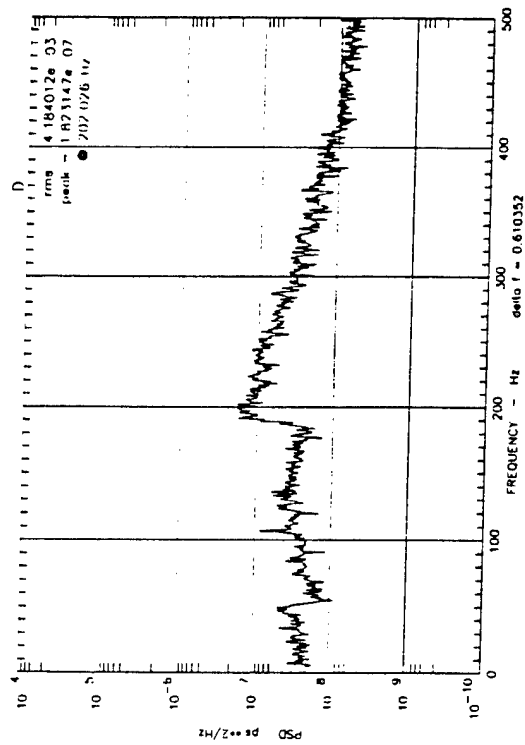
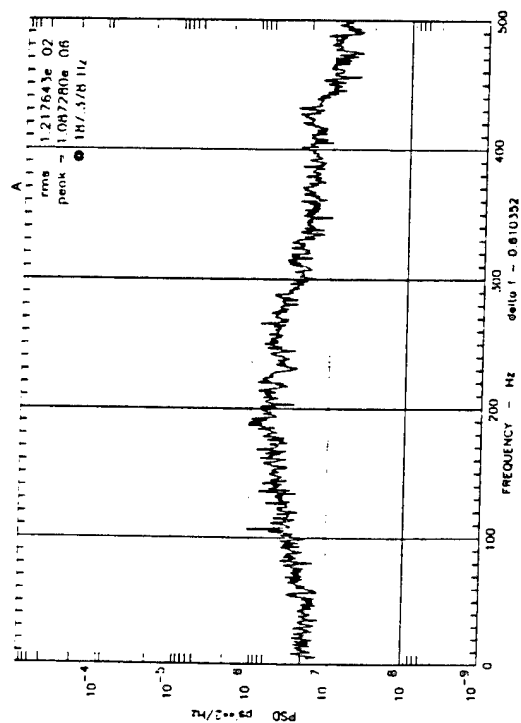
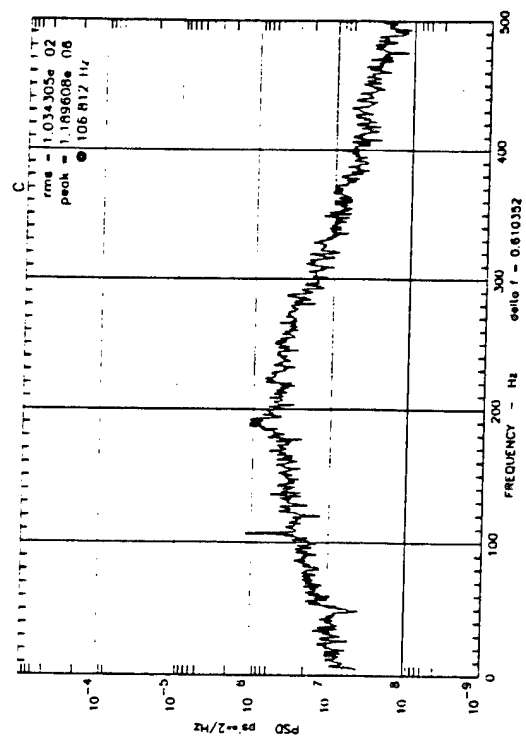


F 15 TPN 2864; alpha=8 beta= 4 bp=0

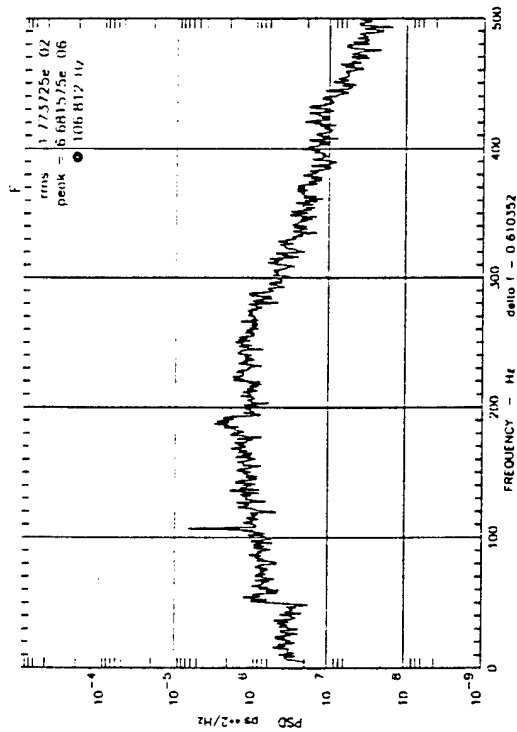


F 15 TPN 2864; alpha=8 beta=4 bp=0

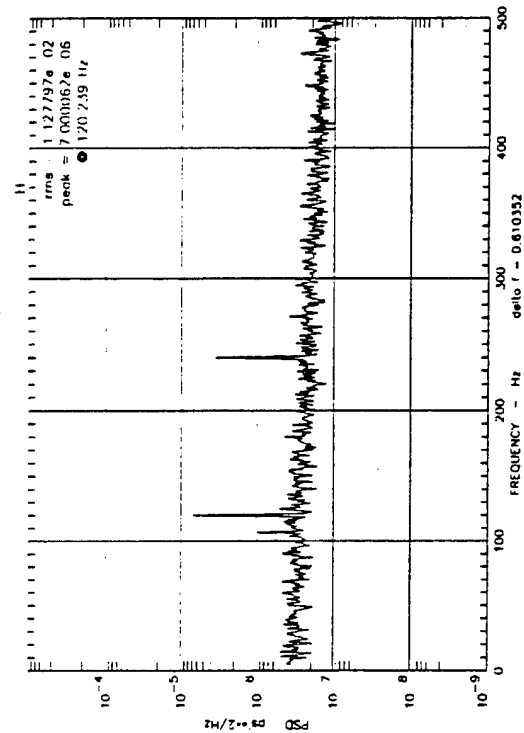


F 15 TPN 2868:  $\alpha=16$   $\beta=0$ F 15 TPN 2868:  $\alpha=16$   $\beta=0$ F 15 TPN 2868:  $\alpha=16$   $\beta=0$ F 15 TPN 2868:  $\alpha=16$   $\beta=0$ 

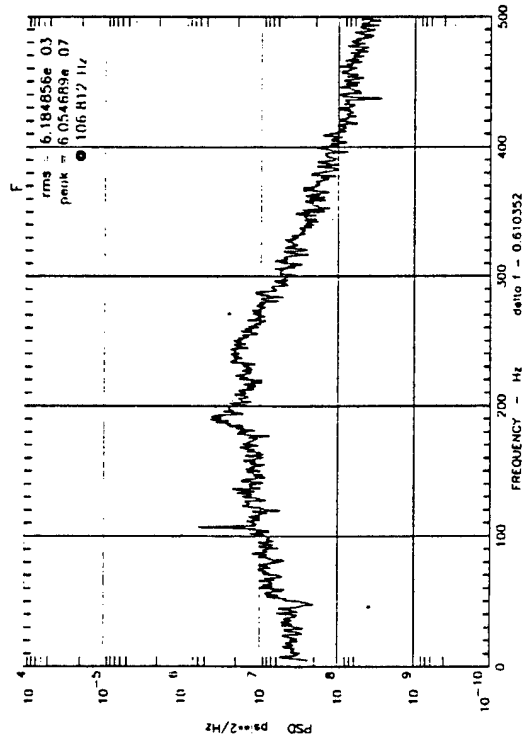
F 15 TPN 2868: alpha=16 beta= 4 bp=0



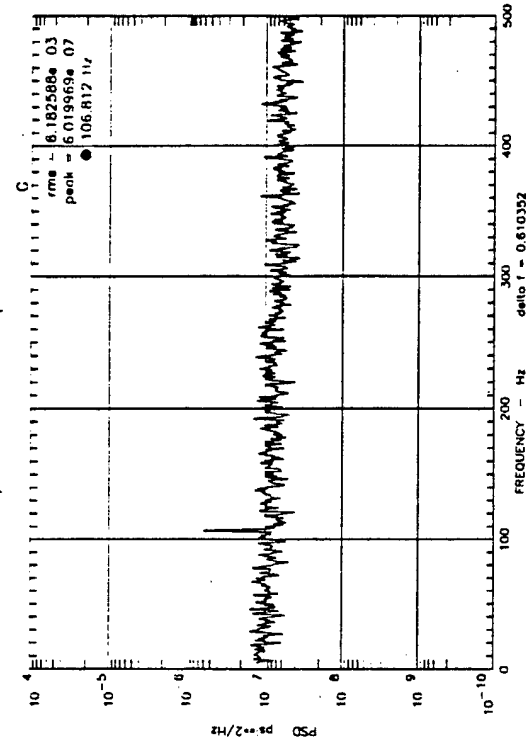
F 15 TPN 2868: alpha=16 beta= 4 bp=0



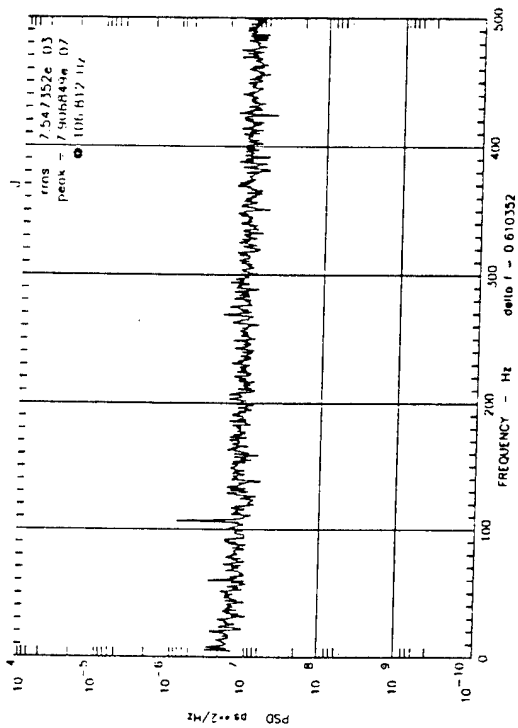
F 15 TPN 2868: alpha=16 beta= 4 bp=0



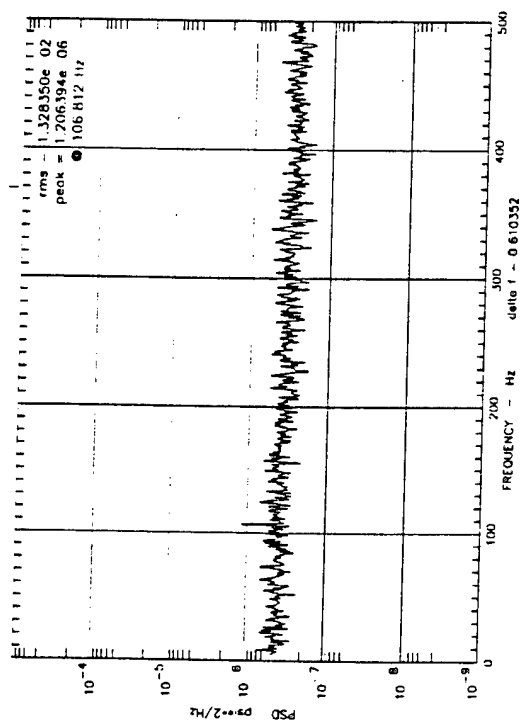
F 15 TPN 2868: alpha=16 beta= 4 bp=0



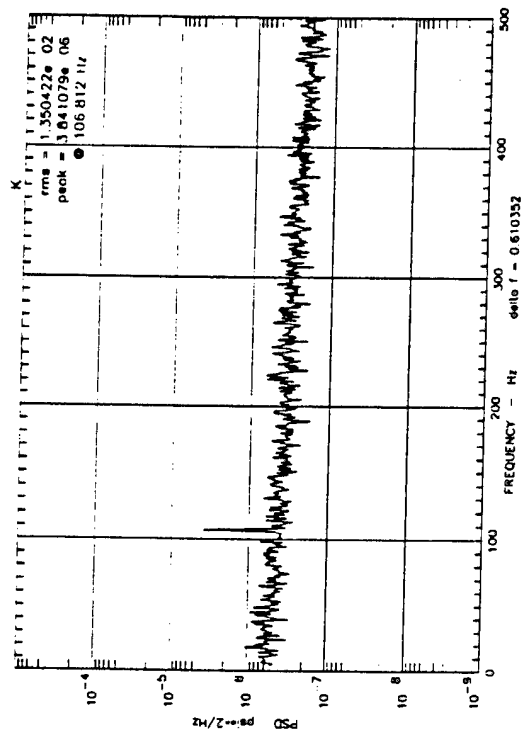
F-15 TPN 2868:  $\alpha=16$   $\beta=4$   $\beta=0$



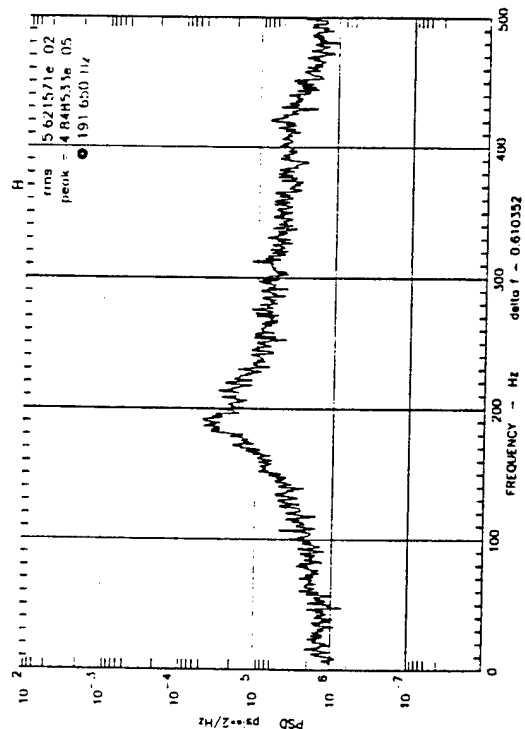
F-15 TPN 2868:  $\alpha=16$   $\beta=4$   $\beta=0$



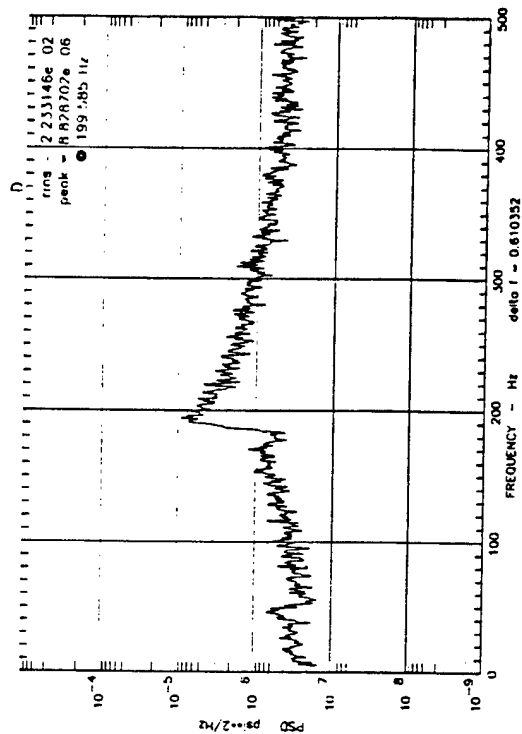
F-15 TPN 2868:  $\alpha=16$   $\beta=-4$   $\beta=0$



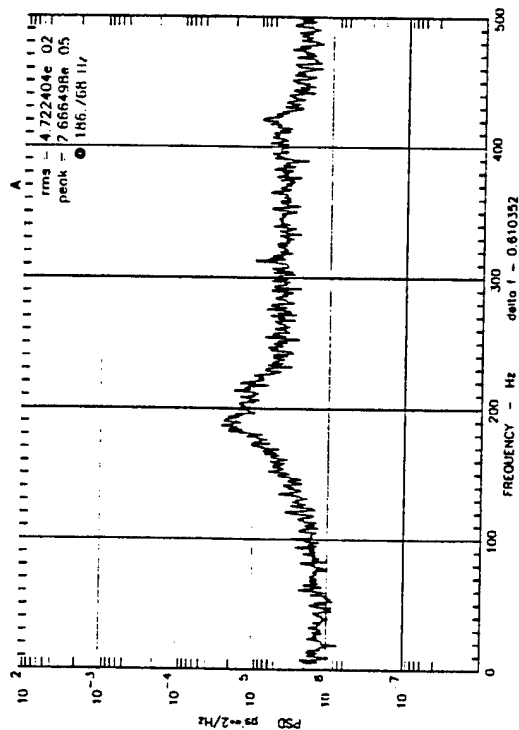
F 15 TPN 2870: alpha=20 beta= 4 bp=0



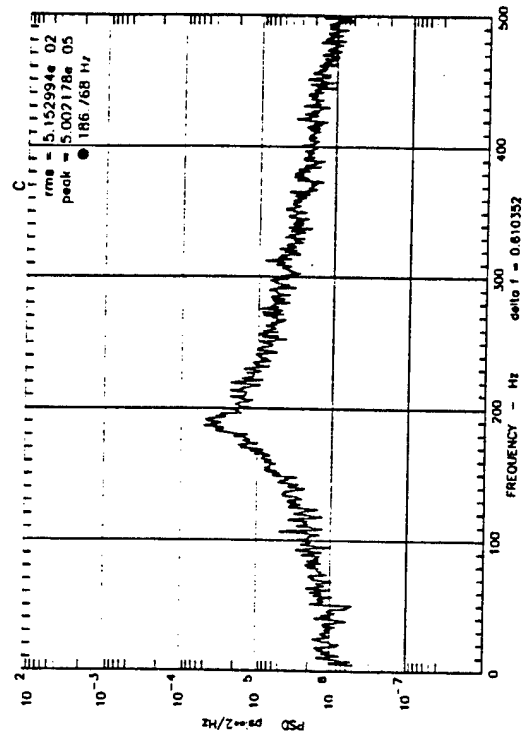
F 15 TPN 2870: alpha=20 beta= 4 bp=0



F 15 TPN 2870: alpha=20 beta= 4 bp=0

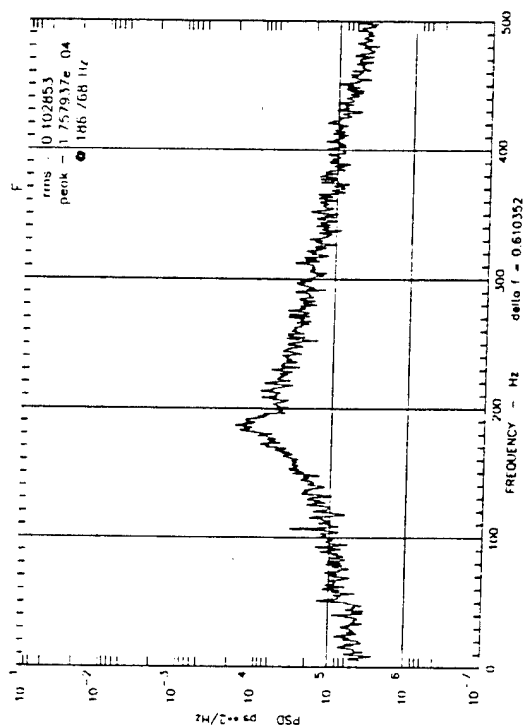


F 15 TPN 2870: alpha=20 beta= 4 bp=0

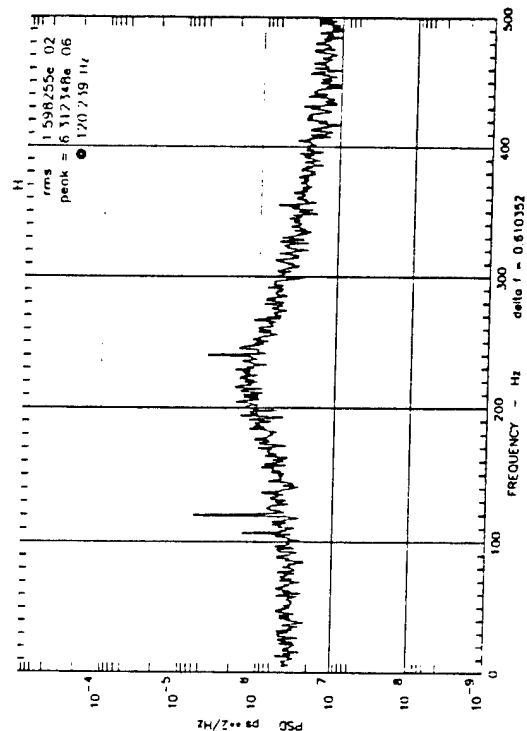




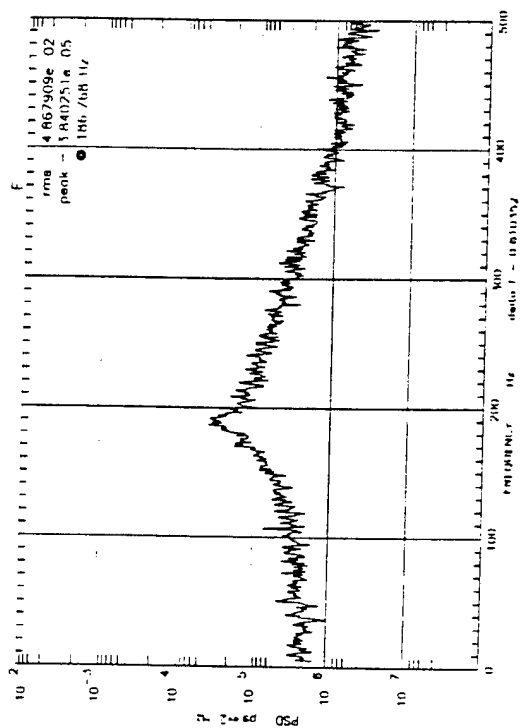
F 15 TPN 2870:  $\alpha=20$   $\beta=0$   $\Delta f = 0.610352$



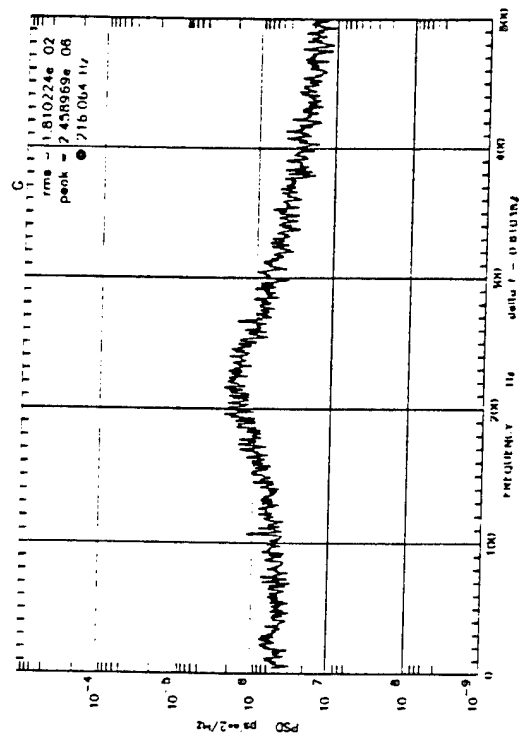
F 15 TPN 2870:  $\alpha=20$   $\beta=0$   $\Delta f = 0.610352$



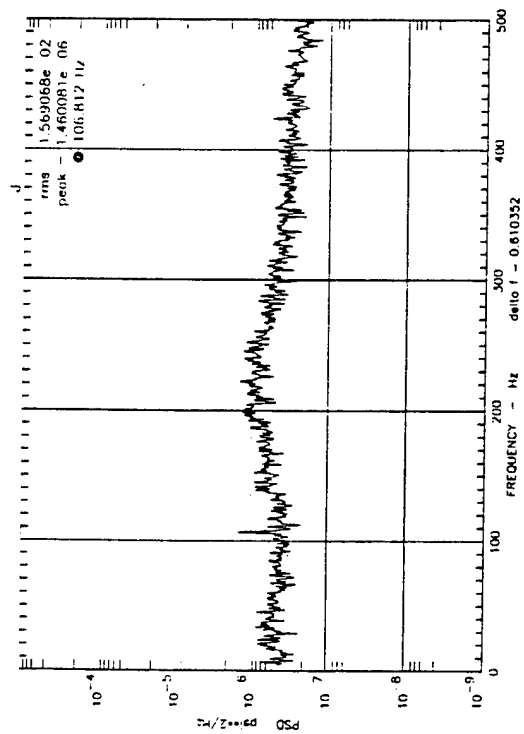
F 15 TPN 2870:  $\alpha=20$   $\beta=0$   $\Delta f = 0.610352$



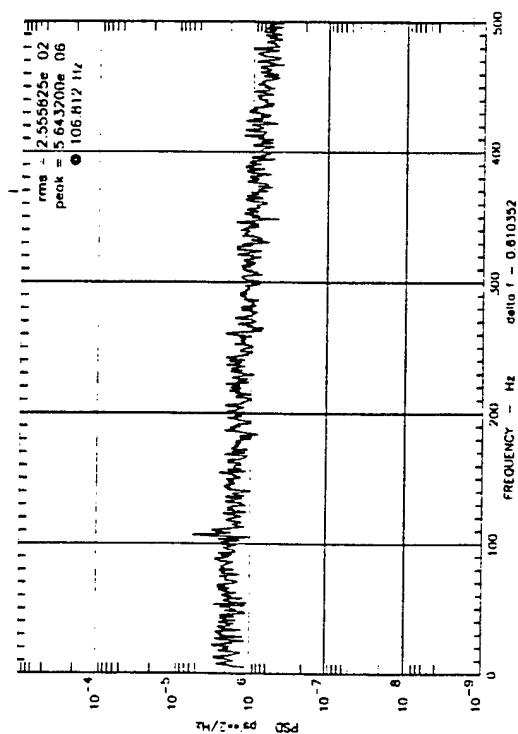
F 15 TPN 2870:  $\alpha=20$   $\beta=0$   $\Delta f = 0.610352$



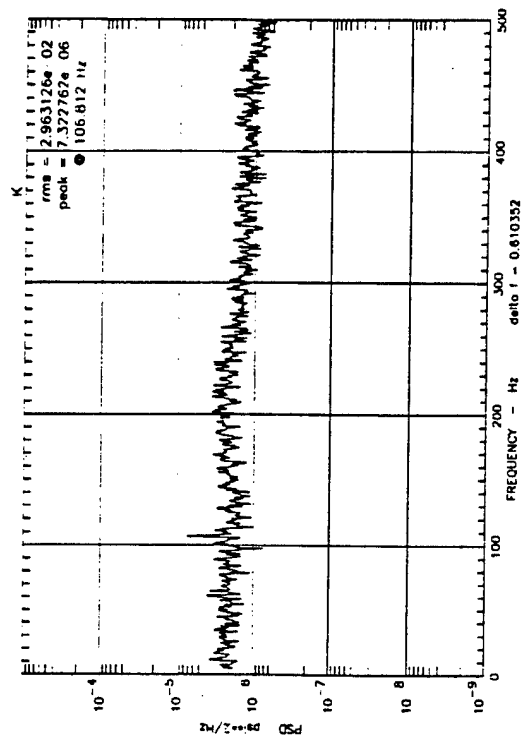
F 15 TPN 2870: alpha-20 beta- 4 bp-0



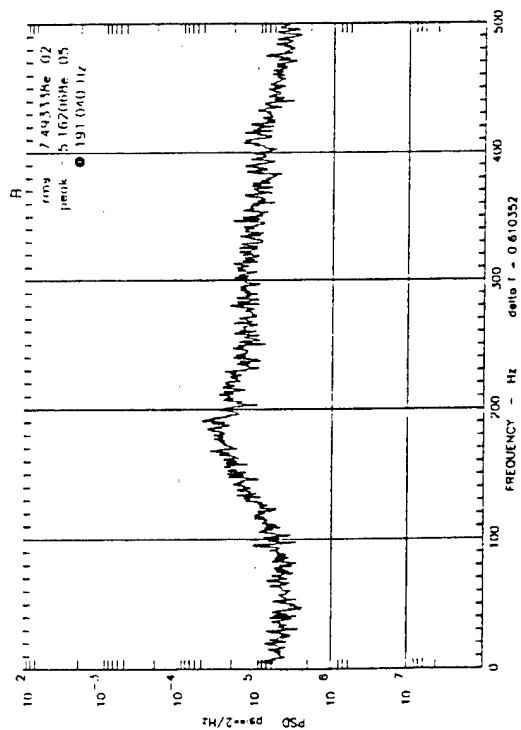
F 15 TPN 2870: alpha-20 beta- 4 bp-0



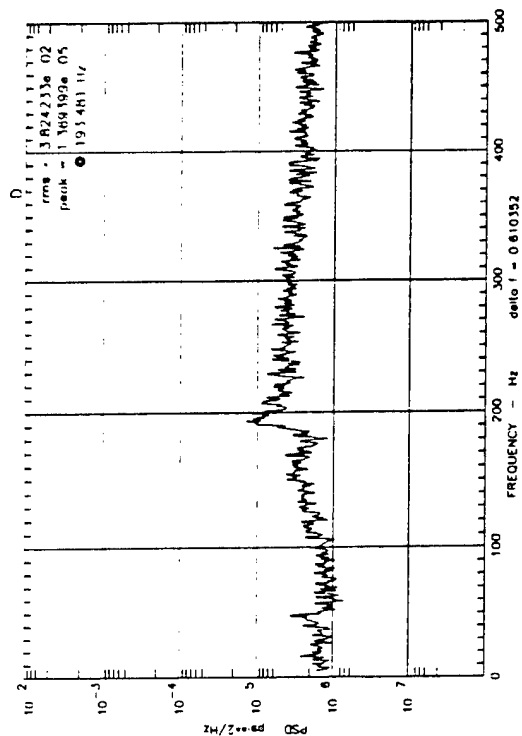
F 15 TPN 2870: alpha-20 beta- 4 bp-0



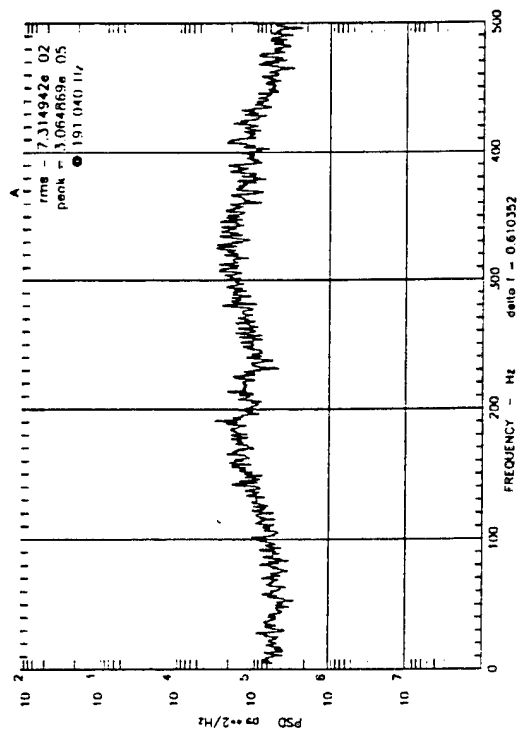
F 15 TPN 2872:  $\alpha=24$   $\beta=0$



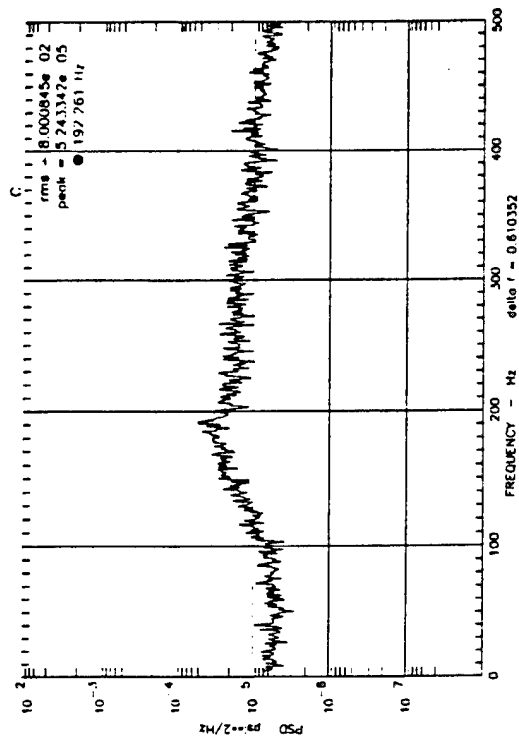
F 15 TPN 2872:  $\alpha=24$   $\beta=0$



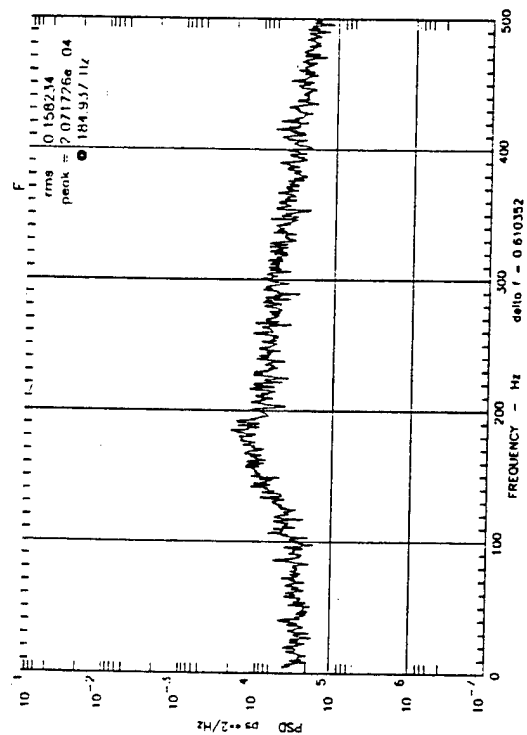
F 15 TPN 2872:  $\alpha=24$   $\beta=0$



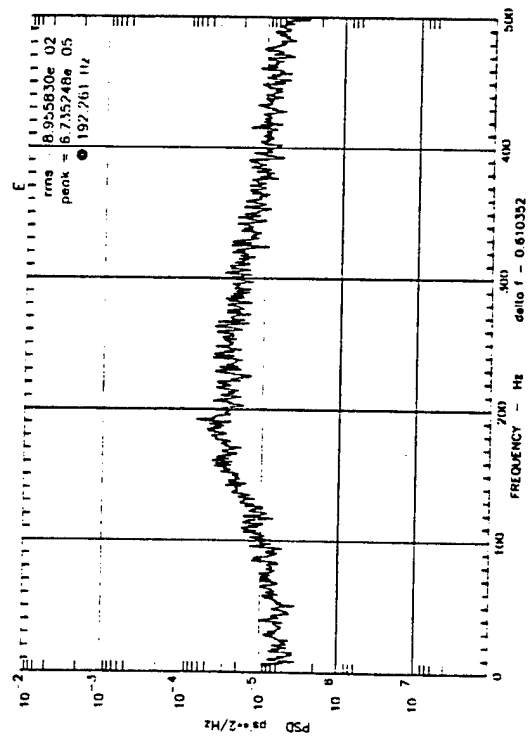
F 15 TPN 2872:  $\alpha=24$   $\beta=0$



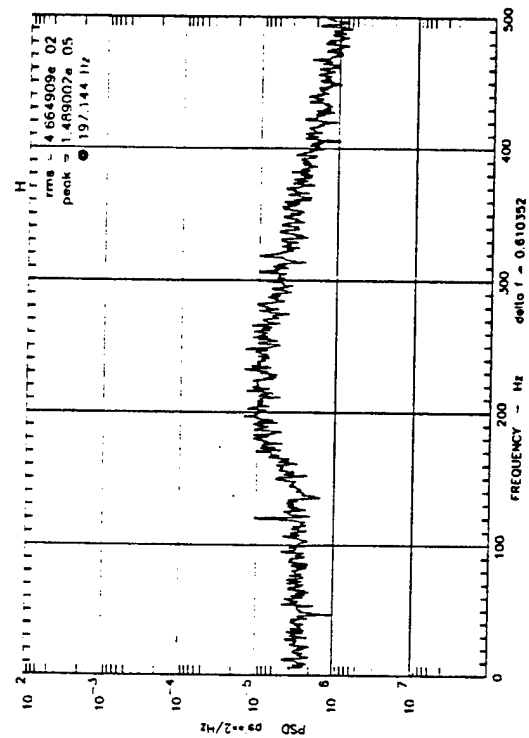
F 15 TPN 2872:  $\alpha=24$   $\beta=0$  4 bp=0



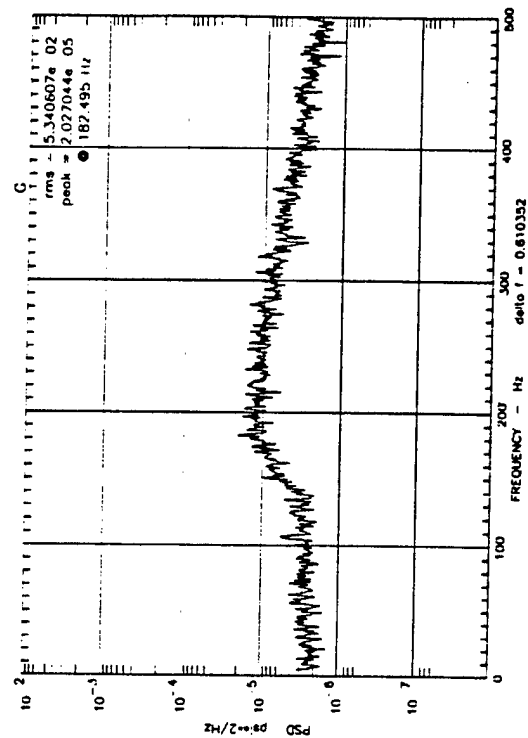
F 15 TPN 2872:  $\alpha=24$   $\beta=0$  4 bp=0



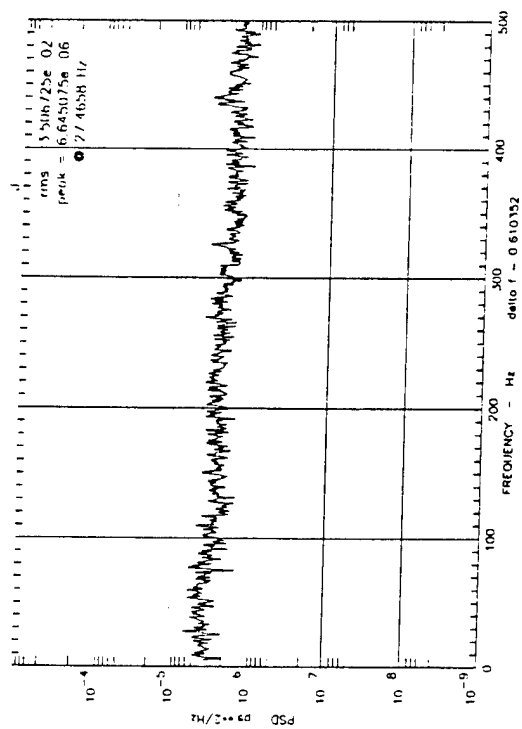
F 15 TPN 2872:  $\alpha=24$   $\beta=0$  4 bp=0



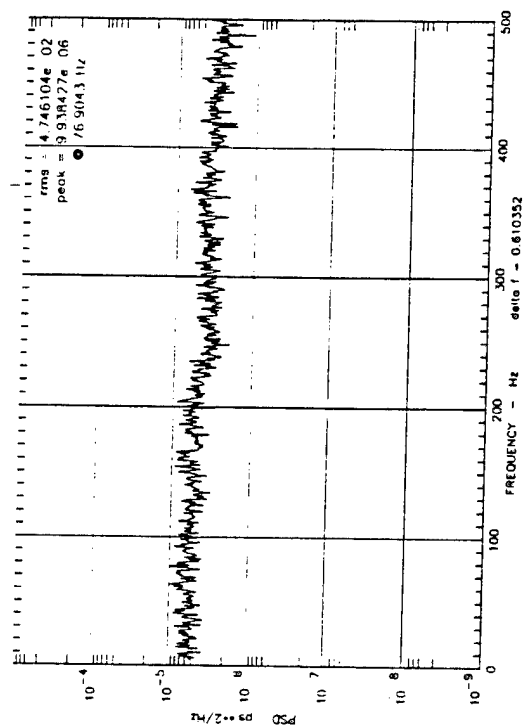
F 15 TPN 2872:  $\alpha=24$   $\beta=0$  4 bp=0



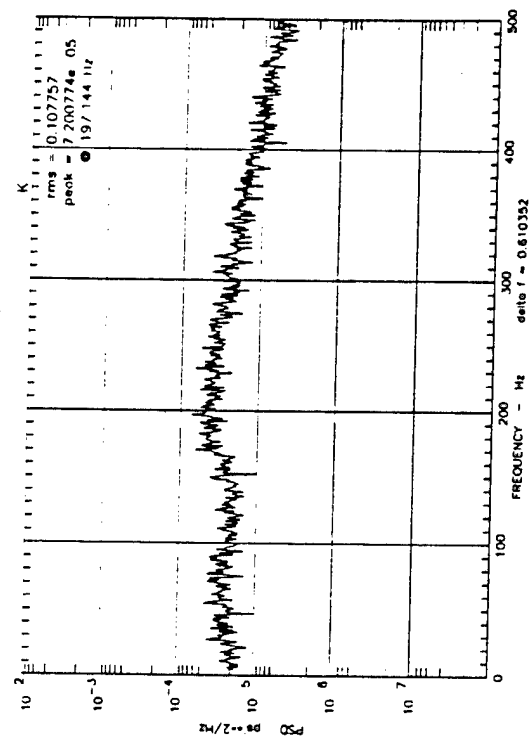
F 15 TPN 2872: alpha=24 beta= 4 bp=0



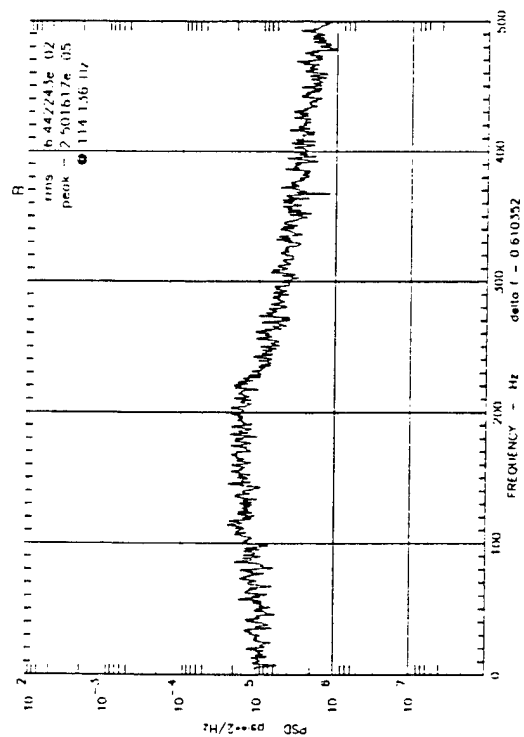
F 15 TPN 2872: alpha=24 beta= 4 bp=0



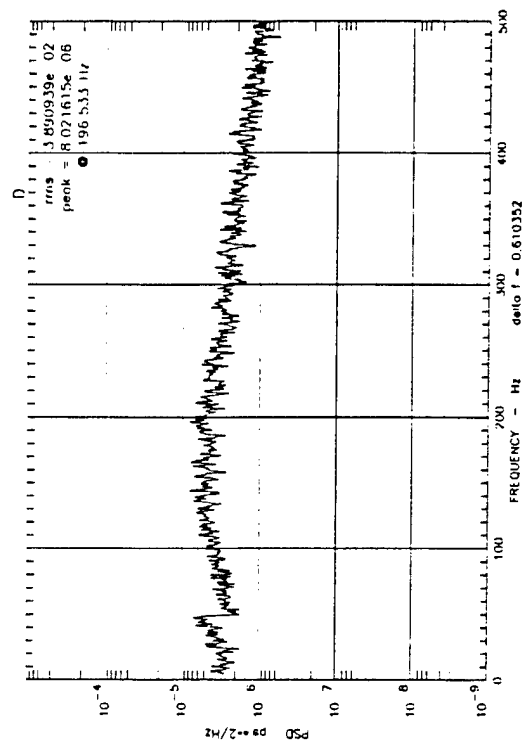
F 15 TPN 2872: alpha=24 beta= 4 bp=0



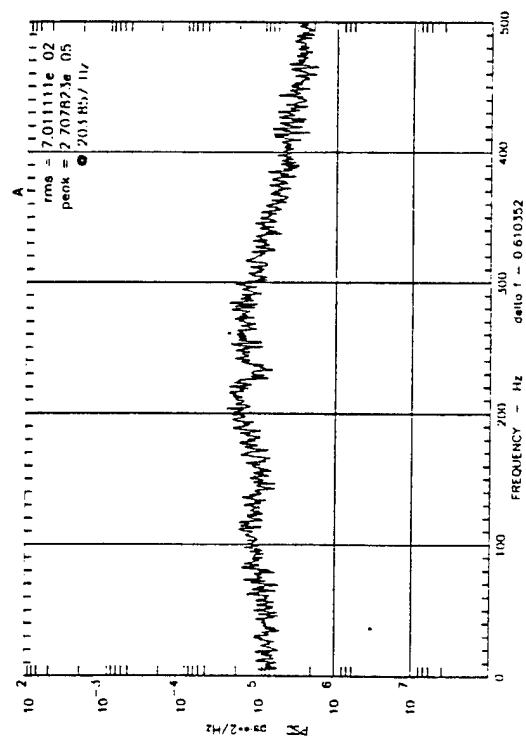
F 15 TPN 2873: alpha=28 beta= -4 bp=0



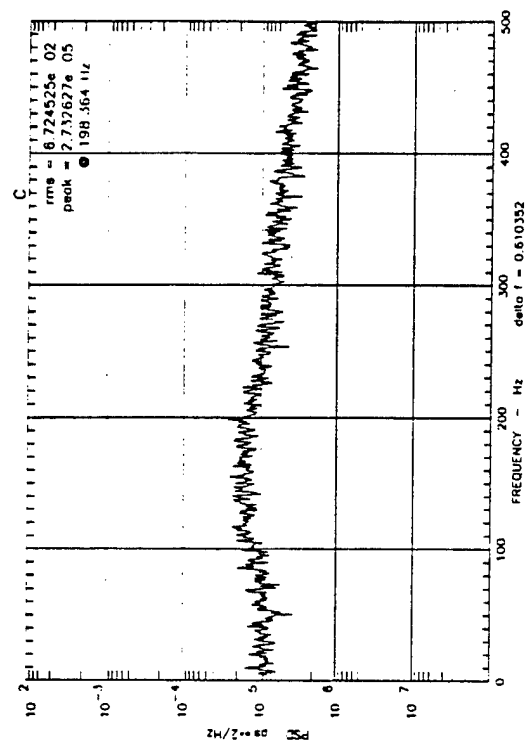
F 15 TPN 2873: alpha=28 beta= -4 bp=0



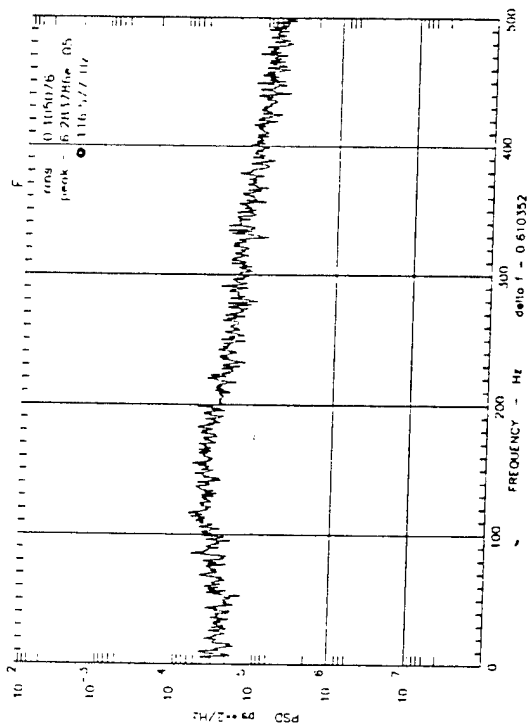
F 15 TPN 2873: alpha=28 beta= -4 bp=0



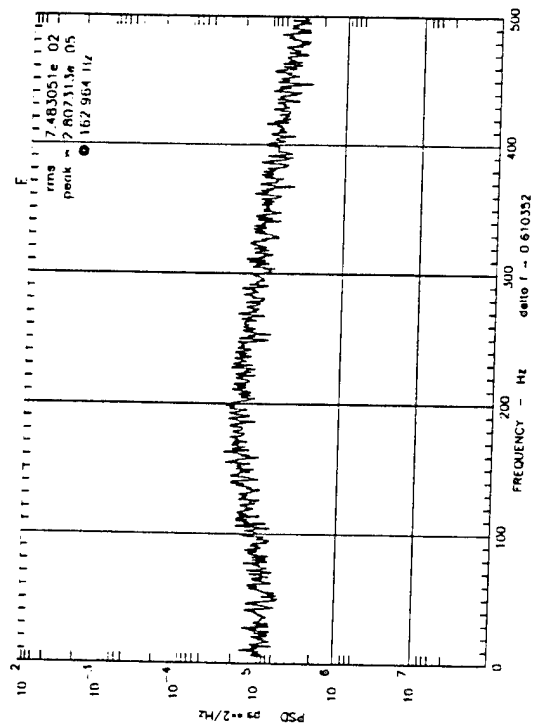
F 15 TPN 2873: alpha=28 beta= -4 bp=0



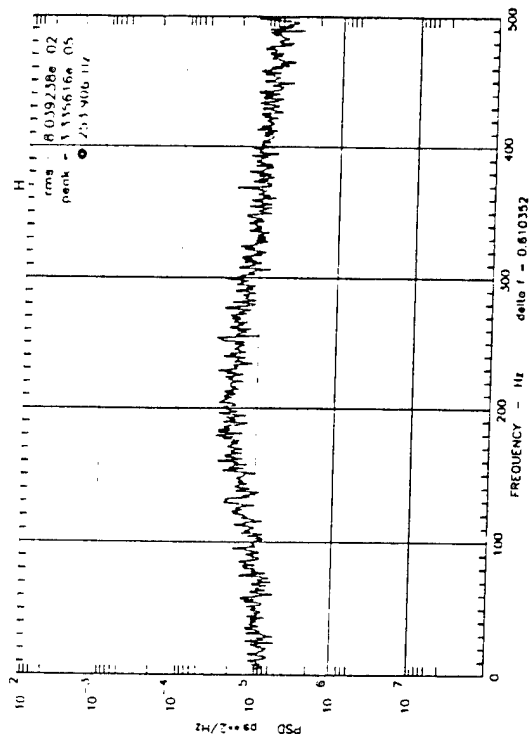
F 15 TPN 2873: alpha=28 beta=0



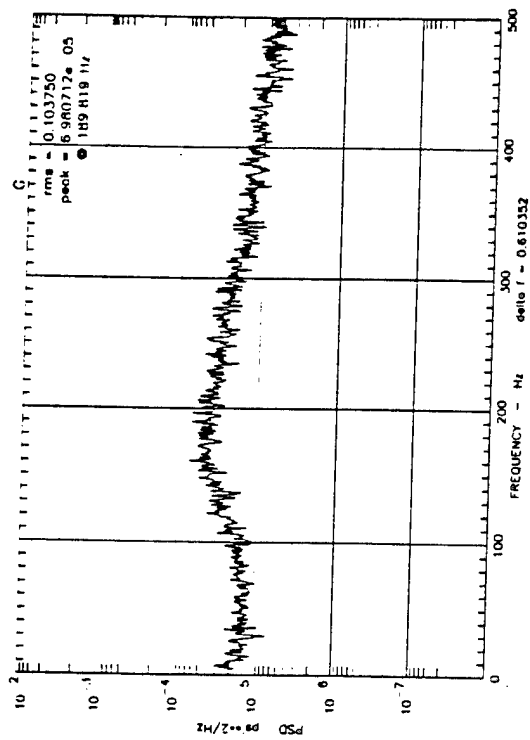
F 15 TPN 2873: alpha=28 beta=0



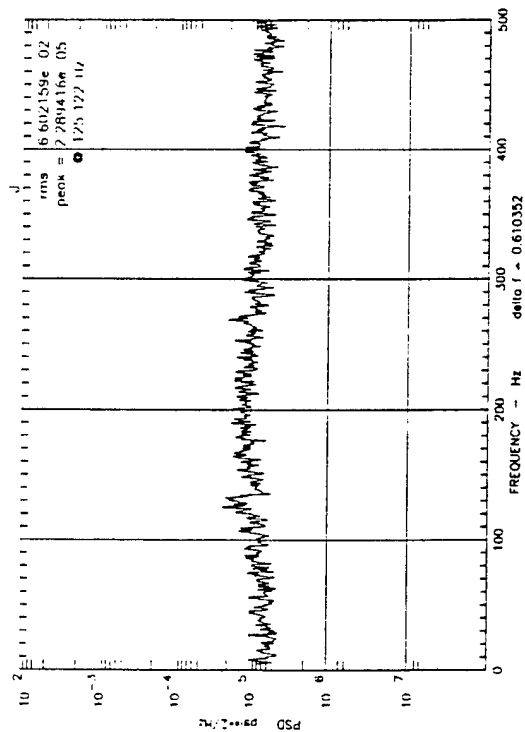
F 15 TPN 2873: alpha=28 beta=0



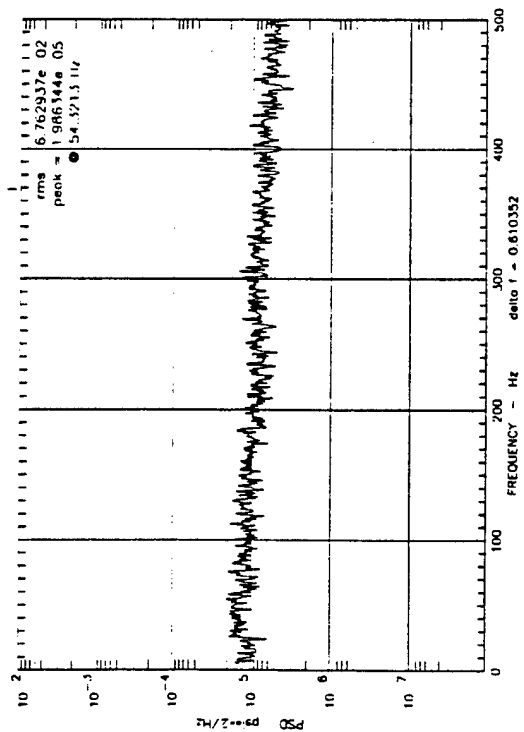
F 15 TPN 2873: alpha=28 beta=0



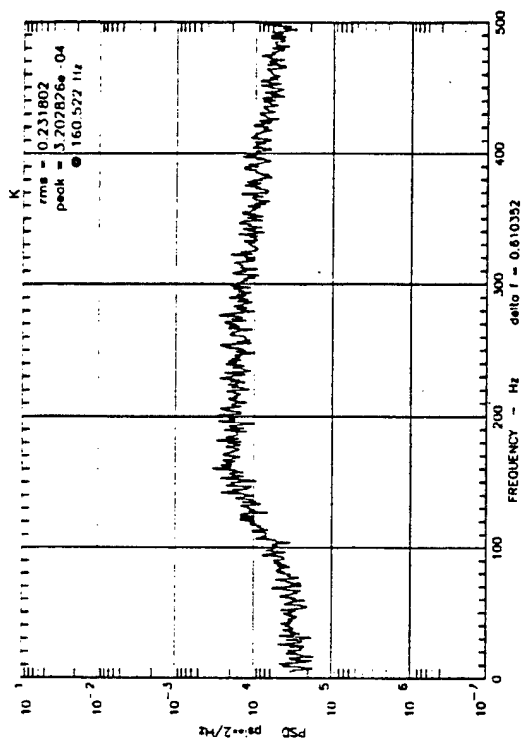
F 15 TPN 2873: alpha=28 beta= 4 bp=0



F 15 TPN 2873: alpha=28 beta= 4 bp=0

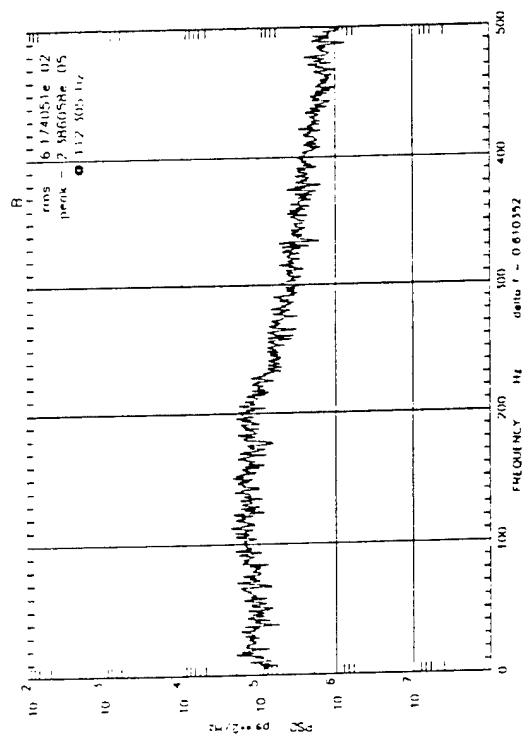


F 15 TPN 2873: alpha=28 beta=-4 bp=0

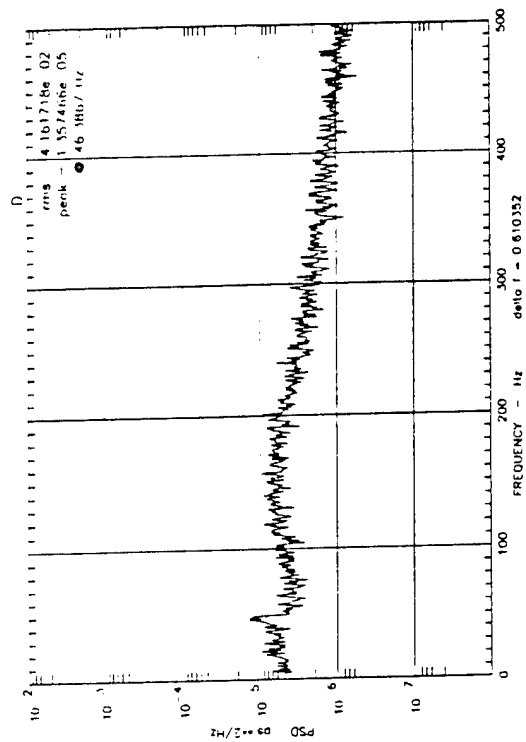




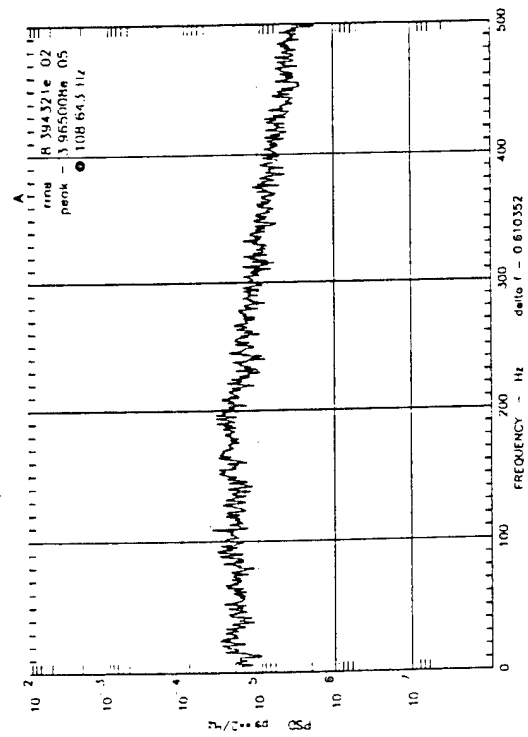
F 15 TPN 2874; alpha=32 beta= 4 bp=0



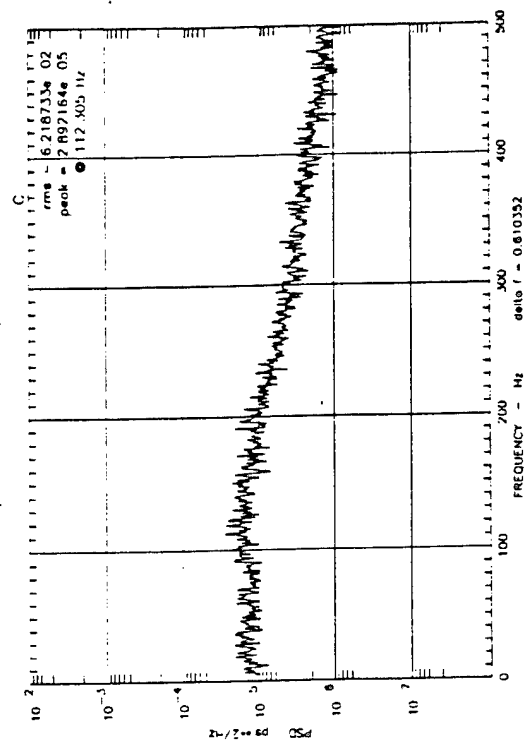
F 15 TPN 2874; alpha=32 beta= 4 bp=0



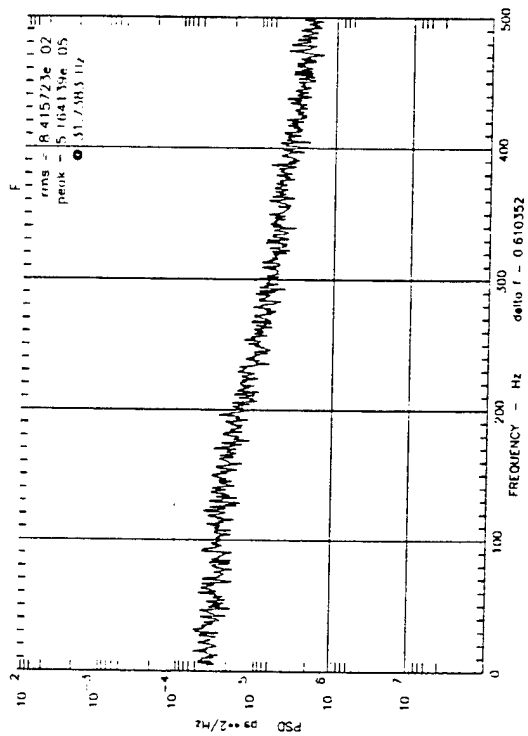
F 15 TPN 2874; alpha=32 beta= 4 bp=0



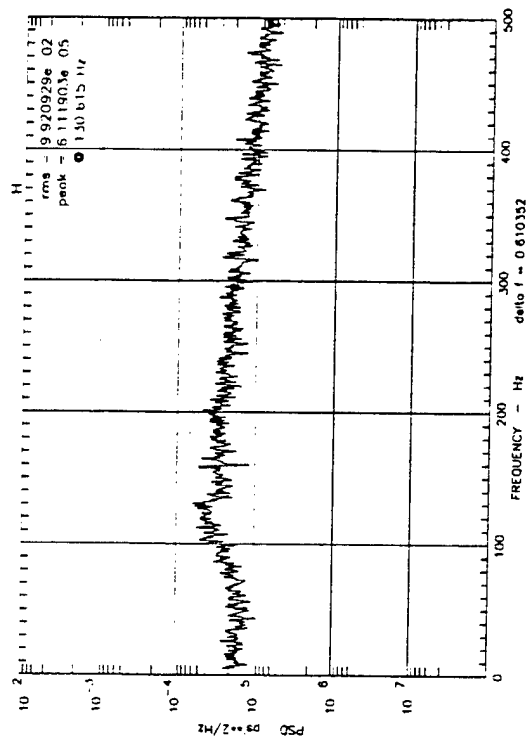
F 15 TPN 2874; alpha=32 beta= 4 bp=0



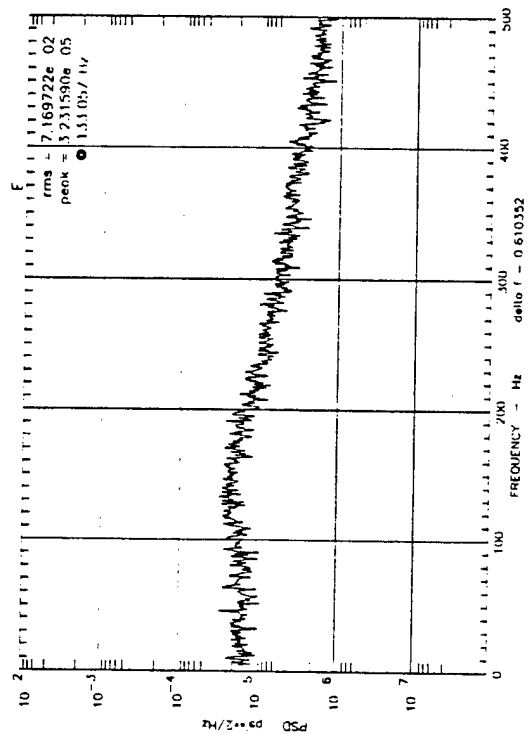
F 15 IPN 2874; alpha=32 beta= 4 bp=0



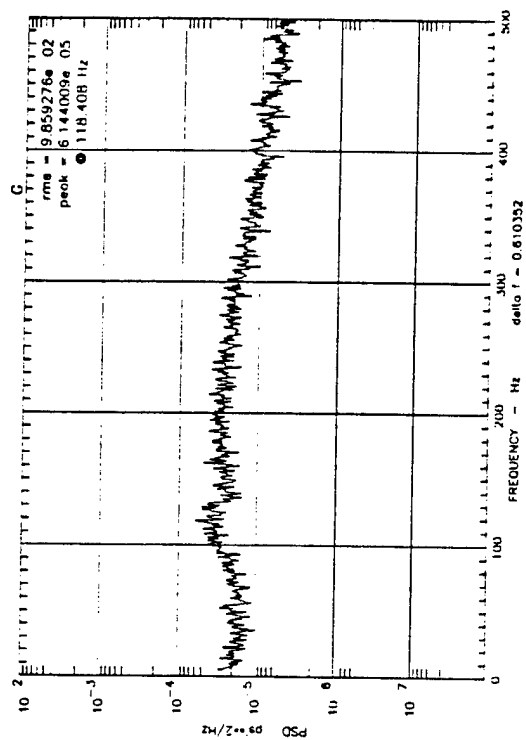
F 15 IPN 2874; alpha=32 beta= 4 bp=0



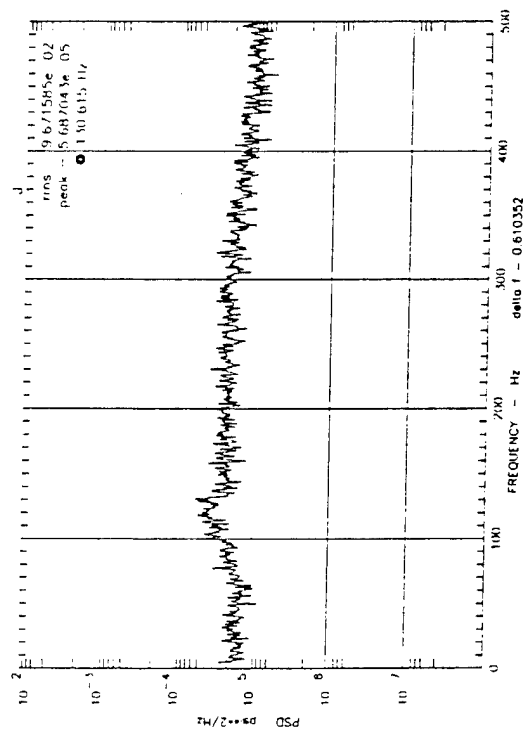
F 15 IPN 2874; alpha=32 beta= 4 bp=0



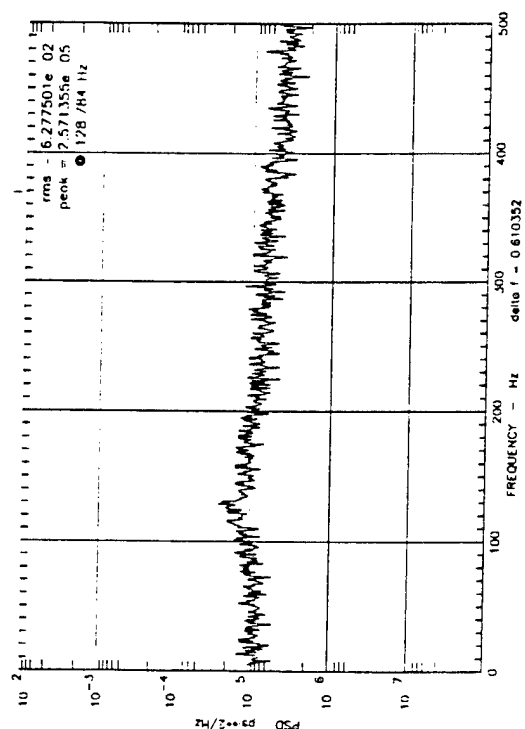
F 15 IPN 2874; alpha=32 beta= 4 bp=0



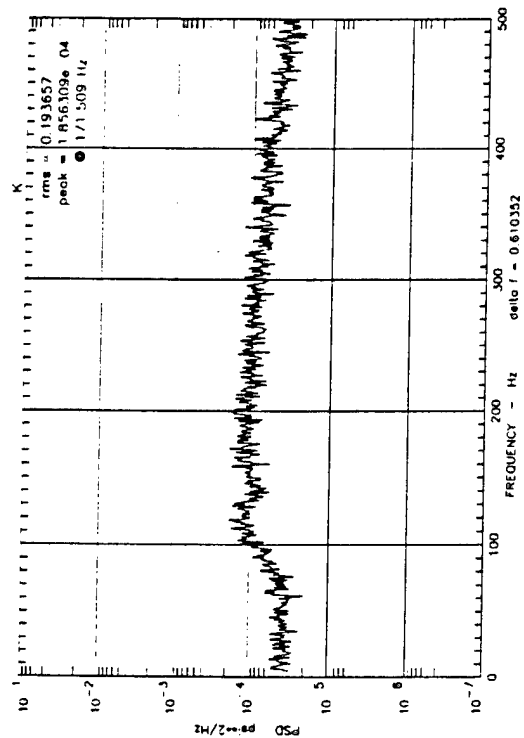
F 15 IPN 2874; alpha=32 beta=0



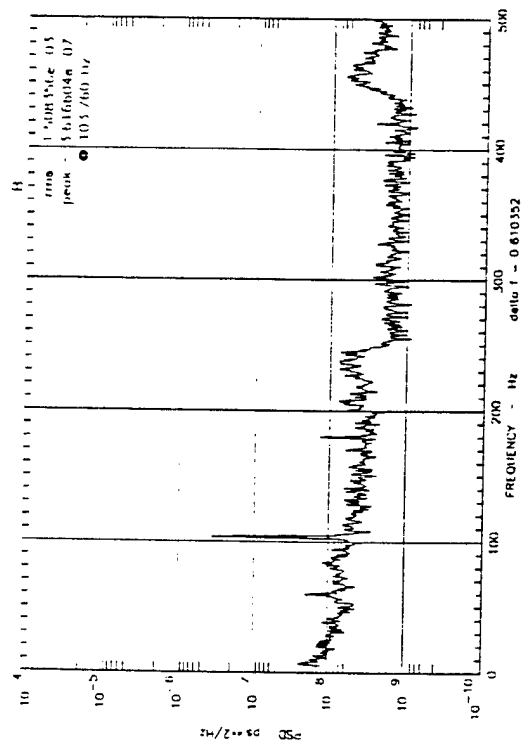
F 15 IPN 2874; alpha=32 beta=0



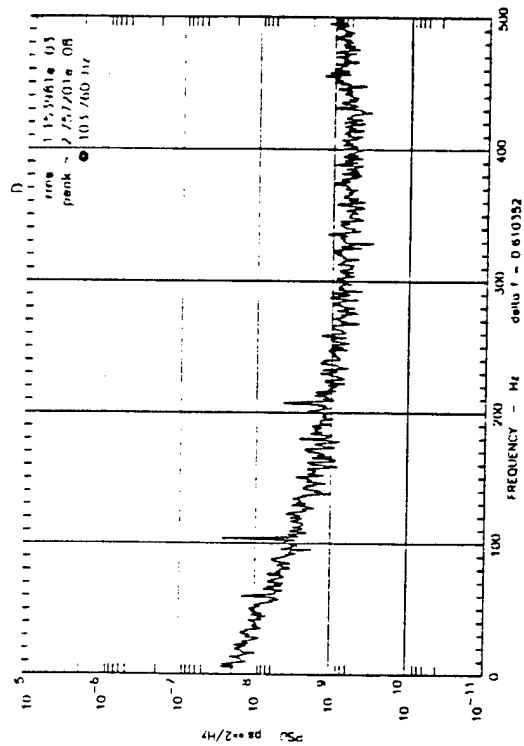
F 15 IPN 2874; alpha=32 beta=0



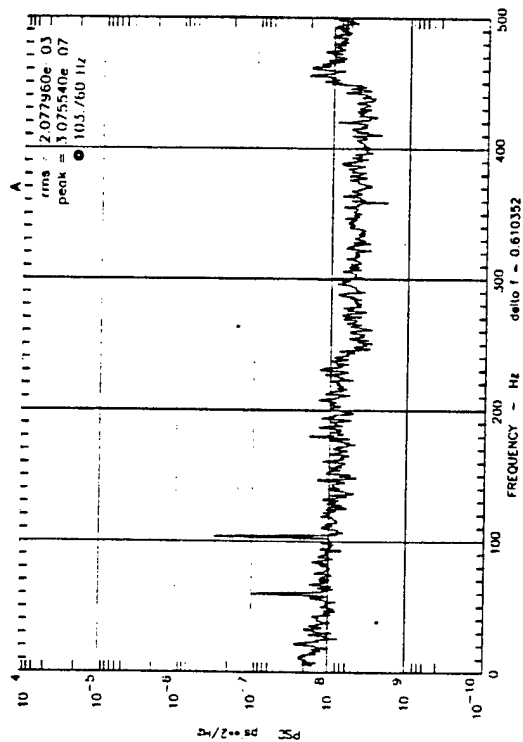
F 15 TPN 3351: alpha=8 beta=4 bp=45



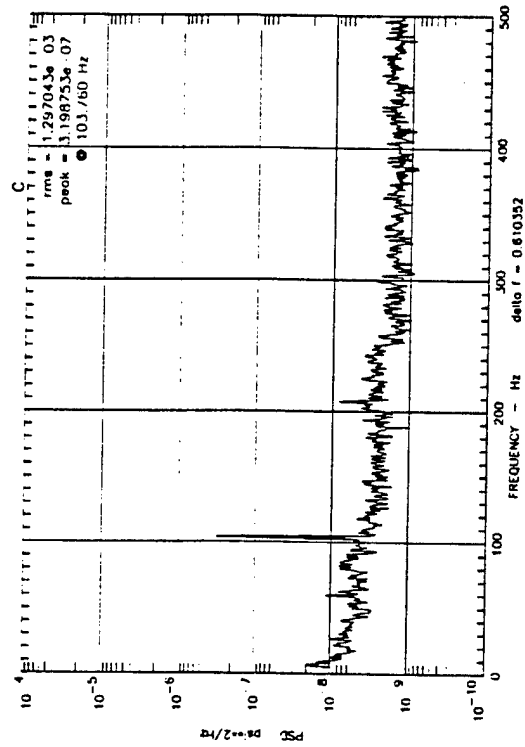
F 15 TPN 3351: alpha=8 beta=4 bp=45



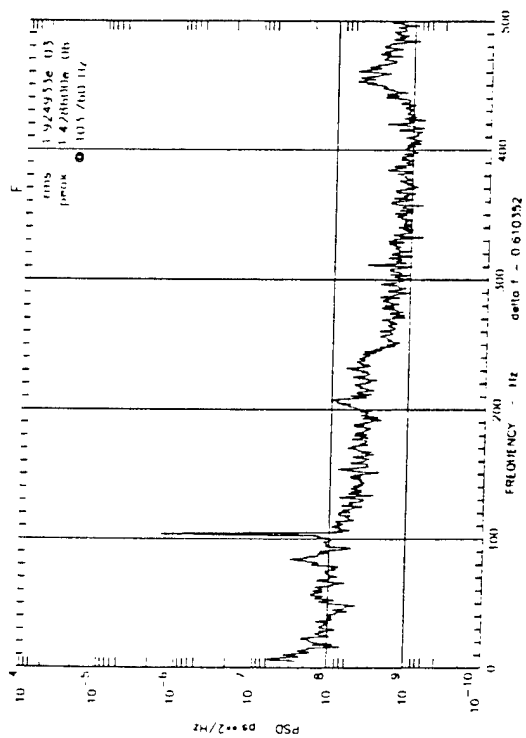
F 15 TPN 3351: alpha=8 beta=4 bp=45



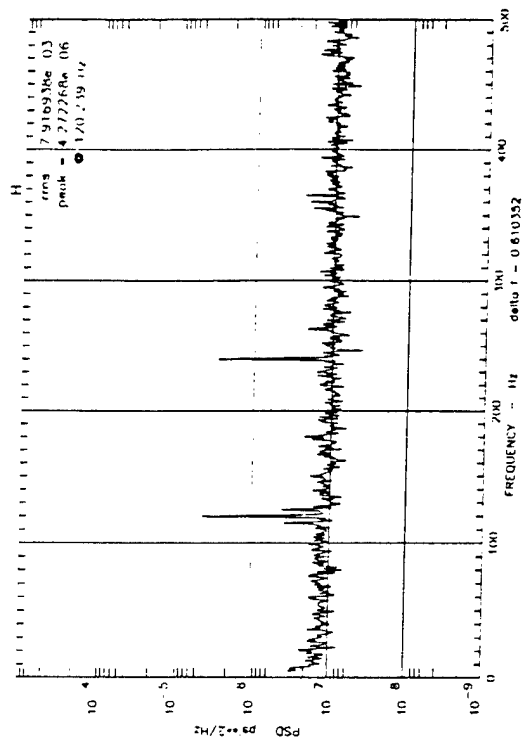
F 15 TPN 3351: alpha=8 beta=4 bp=45



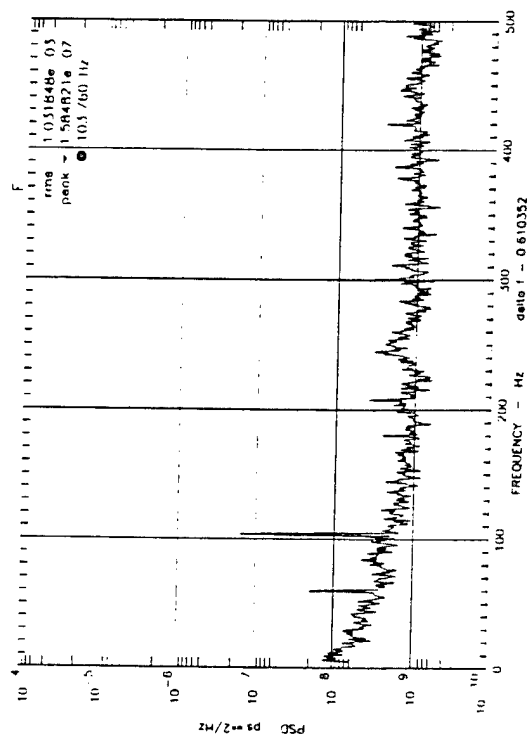
F 15 TPN 3351; alpha-B beta=4 bp-45



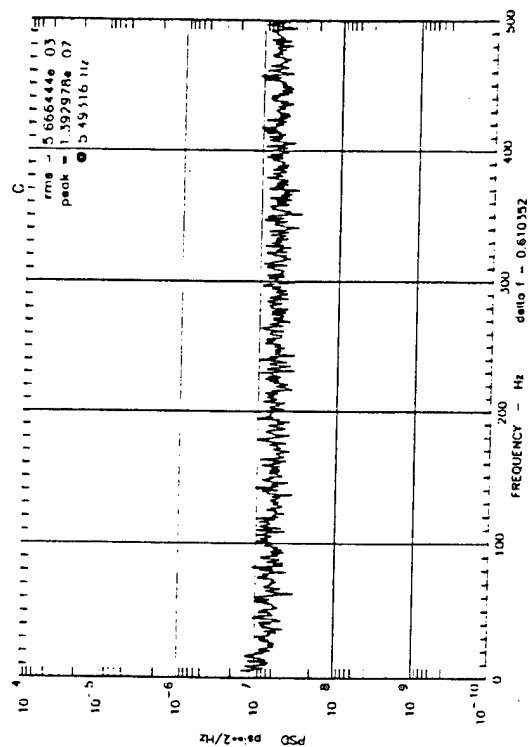
F 15 TPN 3351; alpha-B beta=4 bp-45

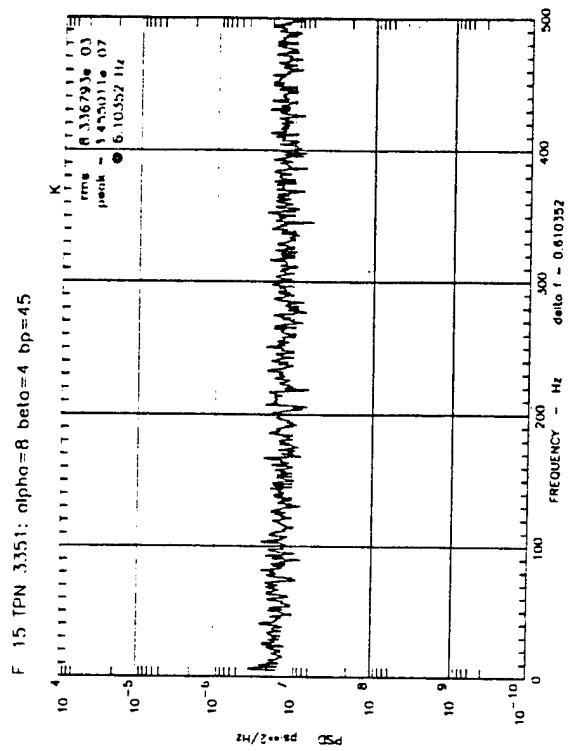
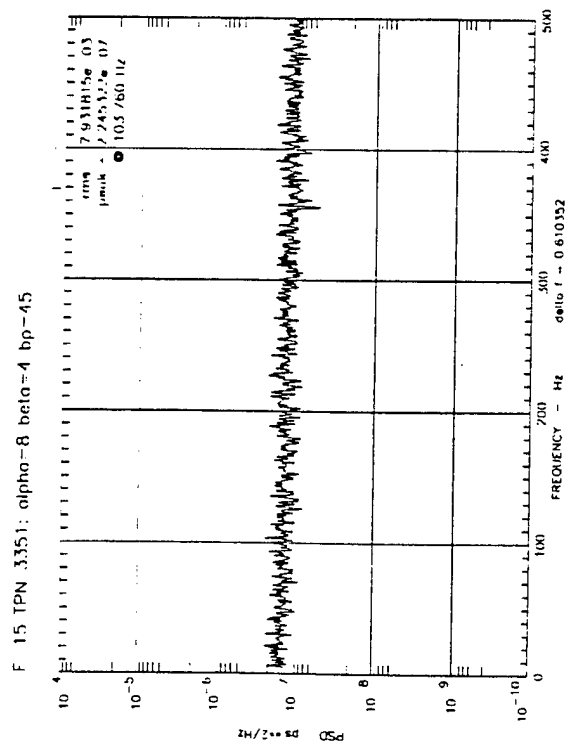
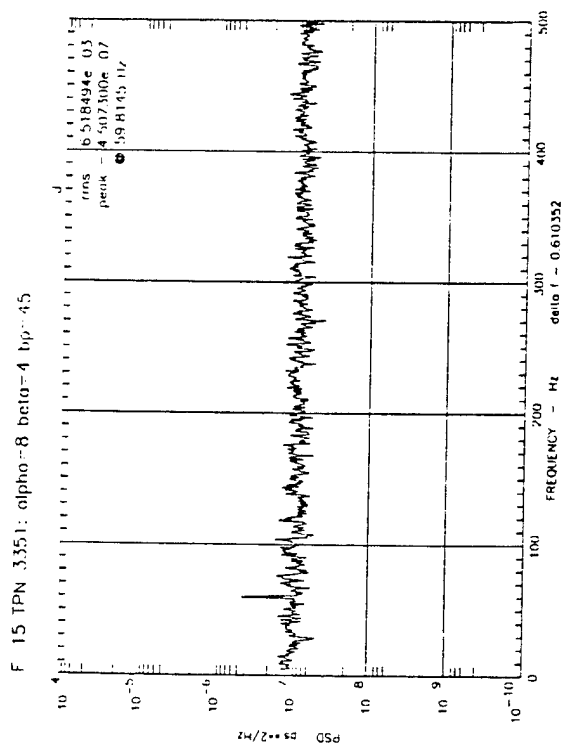


F 15 TPN 3351; alpha-B beta=4 bp-45

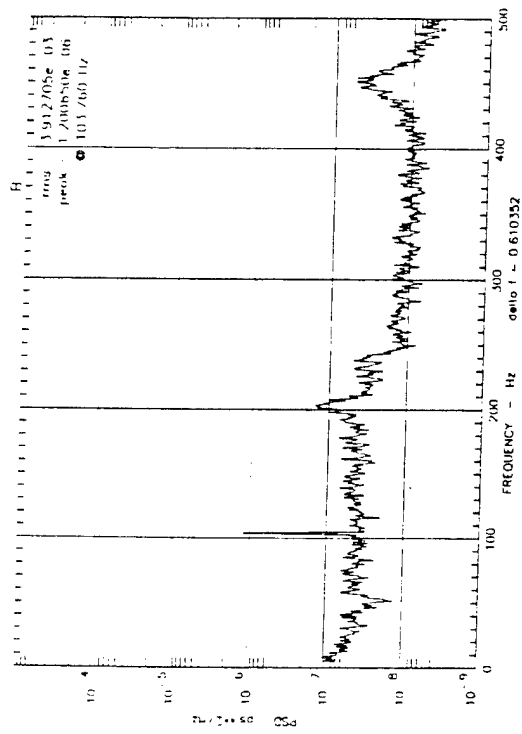


F 15 TPN 3351; alpha-B beta=4 bp-45

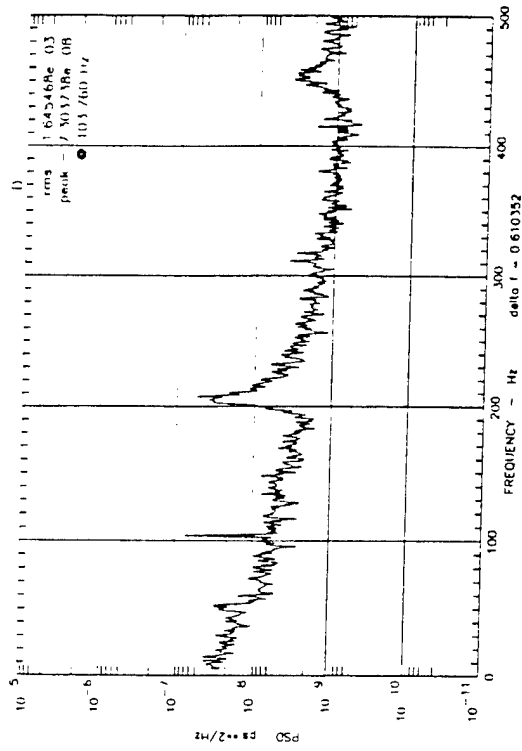




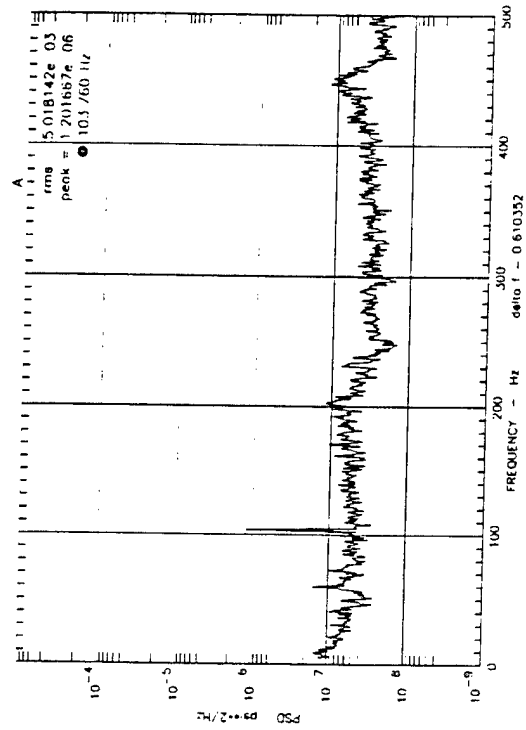
F 15 TPN 3355; alpha=16 beta=4 bp=45



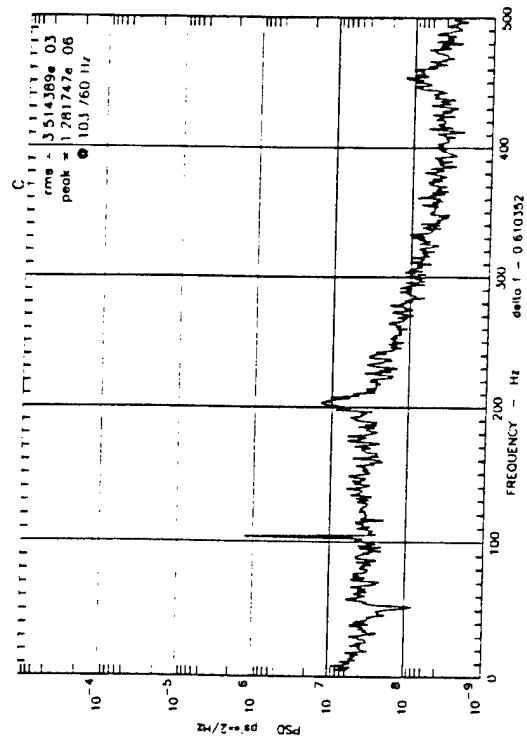
F 15 TPN 3355; alpha=16 beta=4 bp=45



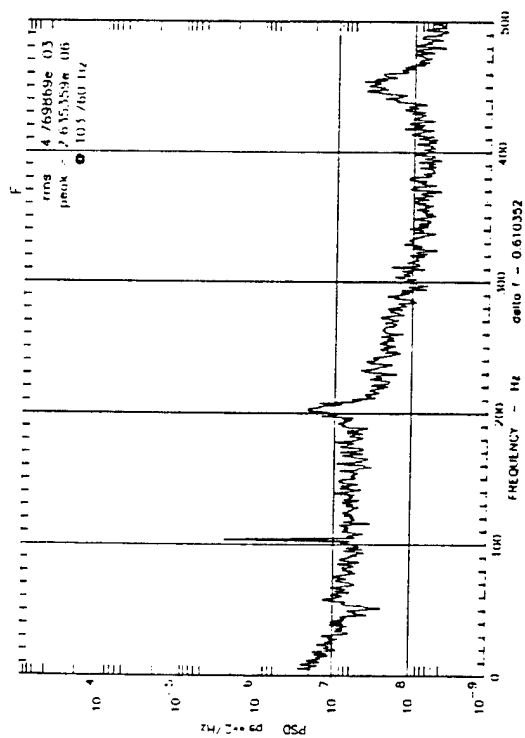
F 15 TPN 3355; alpha=16 beta=4 bp=45



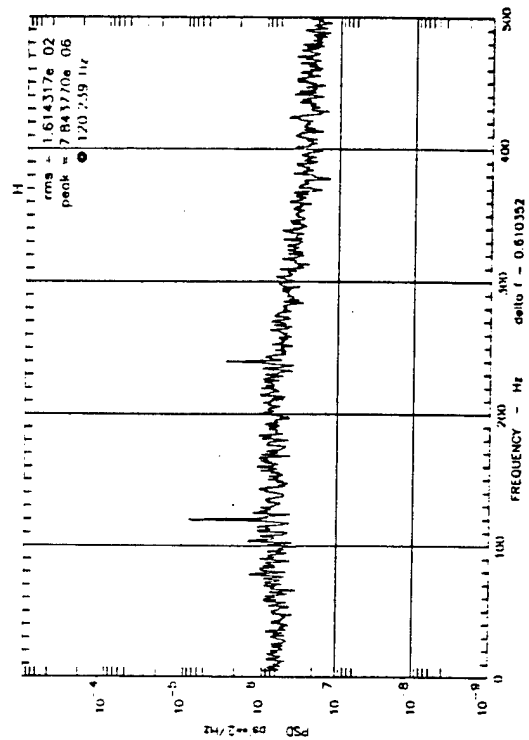
F 15 TPN 3355; alpha=16 beta=4 bp=45



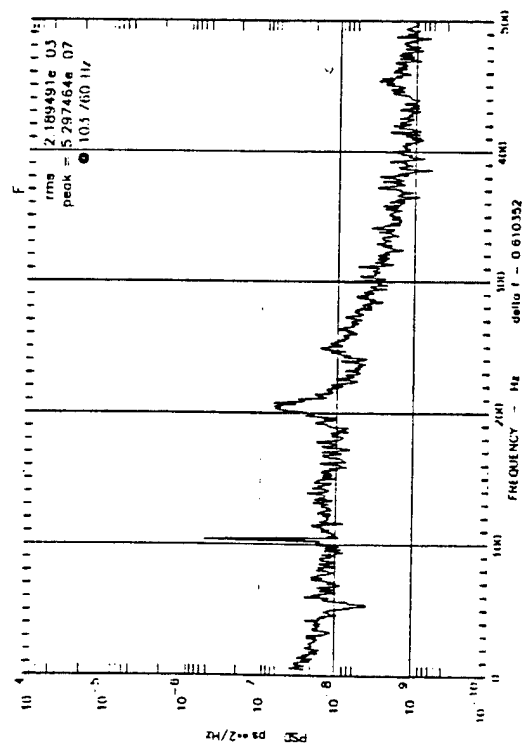
F 15 TPN 3355: alpha=16 beta=4 bp=45



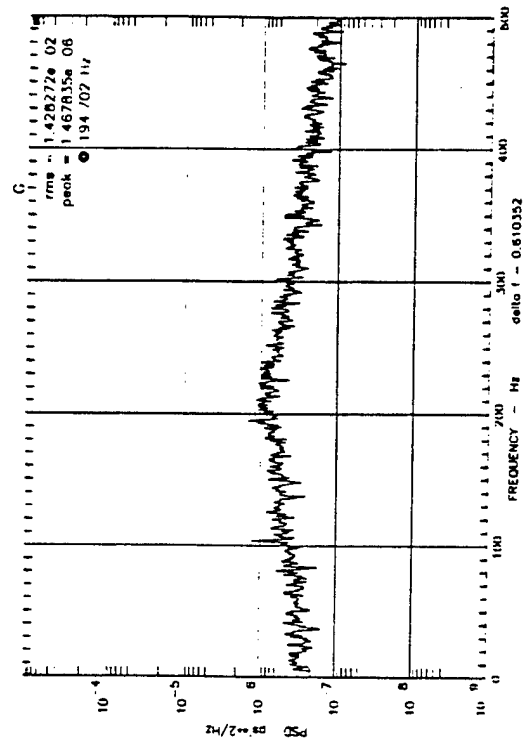
F 15 TPN 3355: alpha=16 beta=4 bp=45



F 15 TPN 3355: alpha=16 beta=4 bp=45

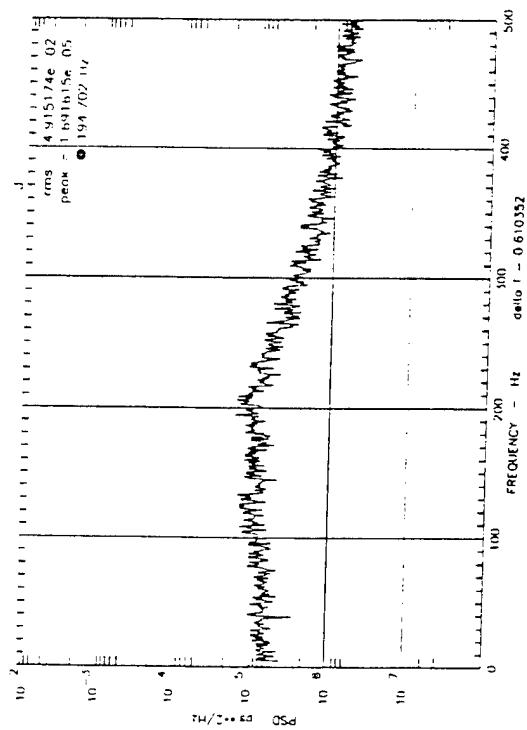


F 15 TPN 3355: alpha=16 beta=4 bp=45

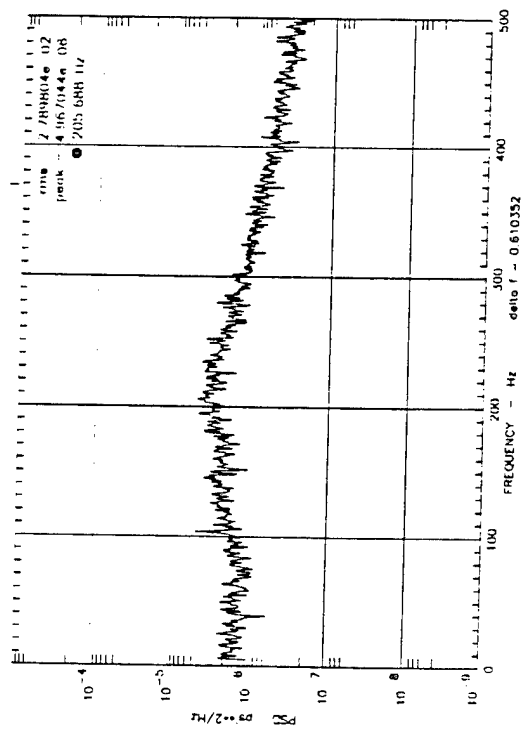




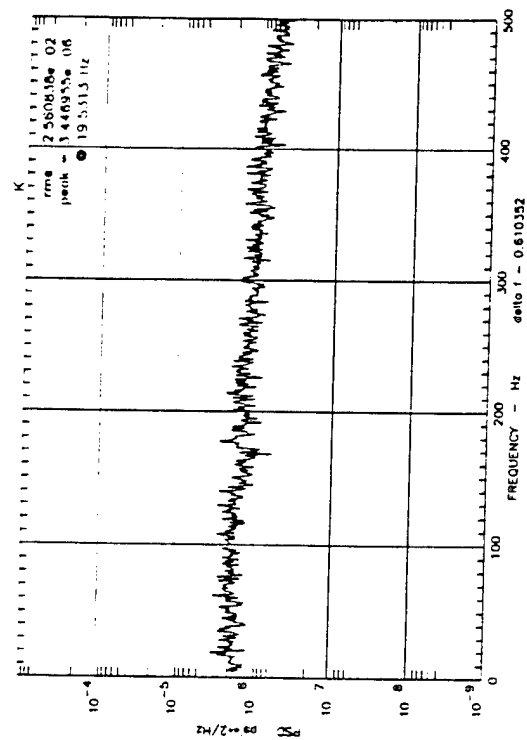
F 15 TPN 3355, alpha=16 beta=4 bp=45



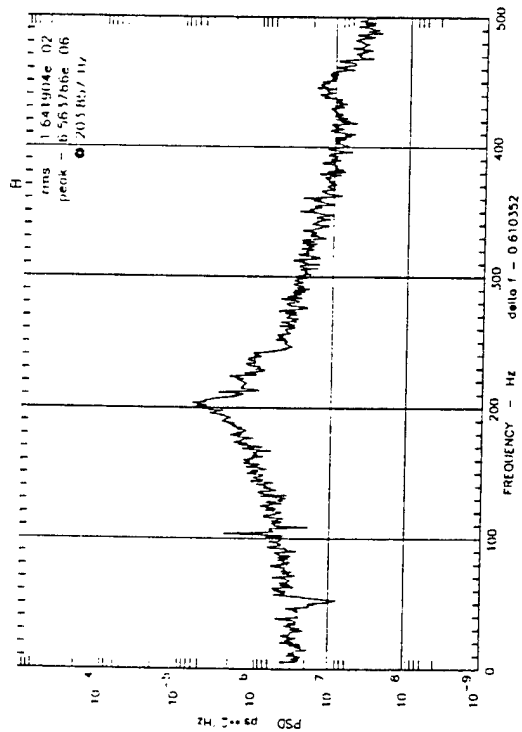
F 15 TPN 3355, alpha=16 beta=4 bp=45



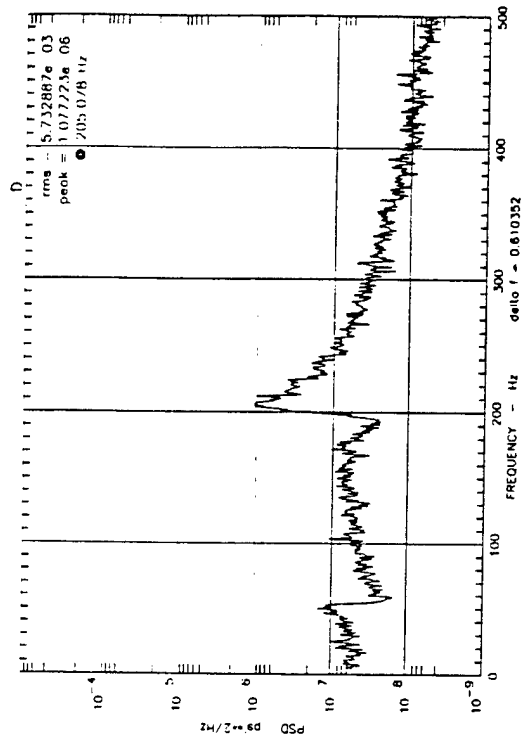
F 15 TPN 3355, alpha=16 beta=4 bp=45



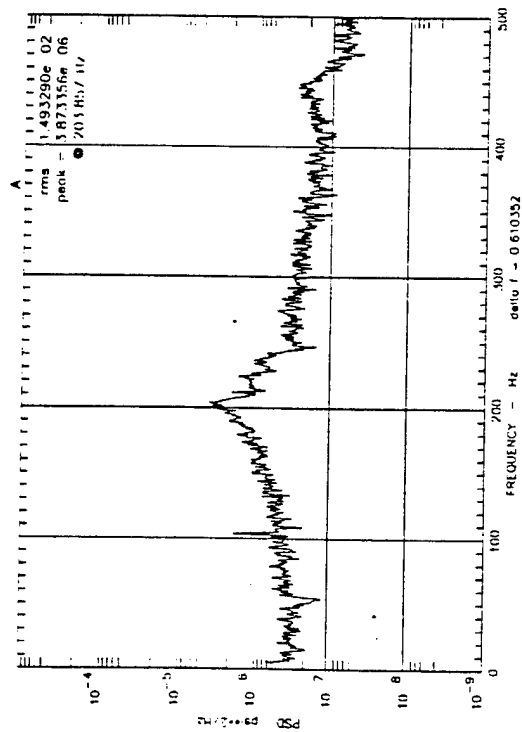
F 15 TPN .3357: alpha=20 beta=4 bp=45



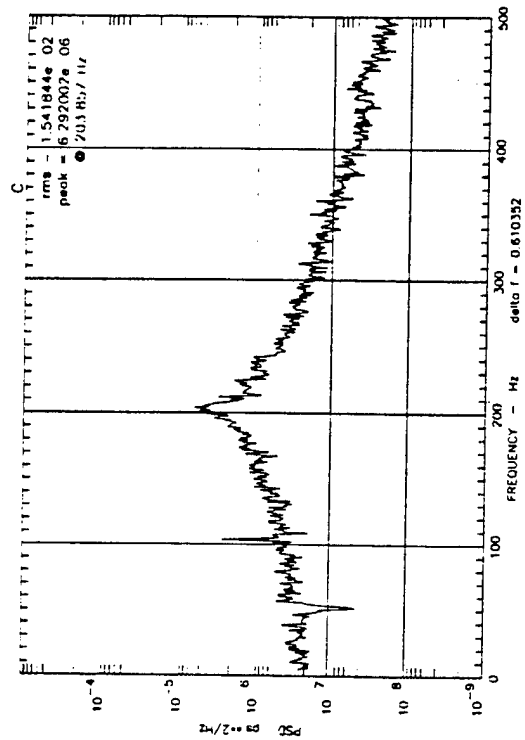
F 15 TPN .3357: alpha=20 beta=4 bp=45



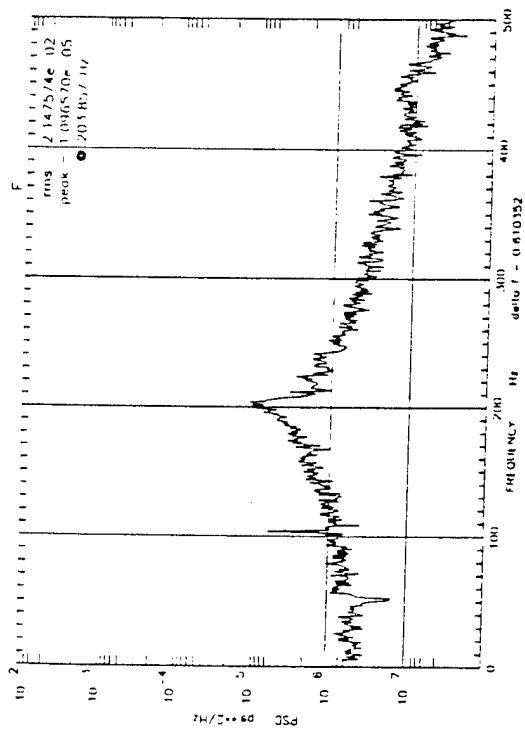
F 15 TPN .3357: alpha=20 beta=4 bp=45



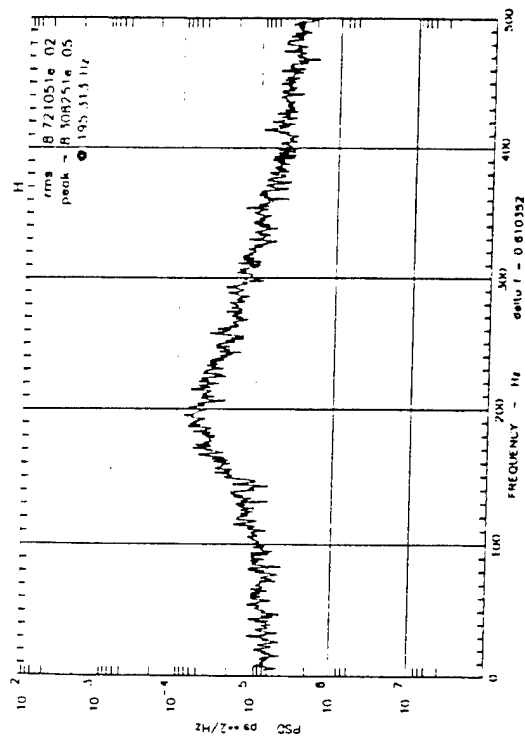
F 15 TPN .3357: alpha=20 beta=4 bp=45



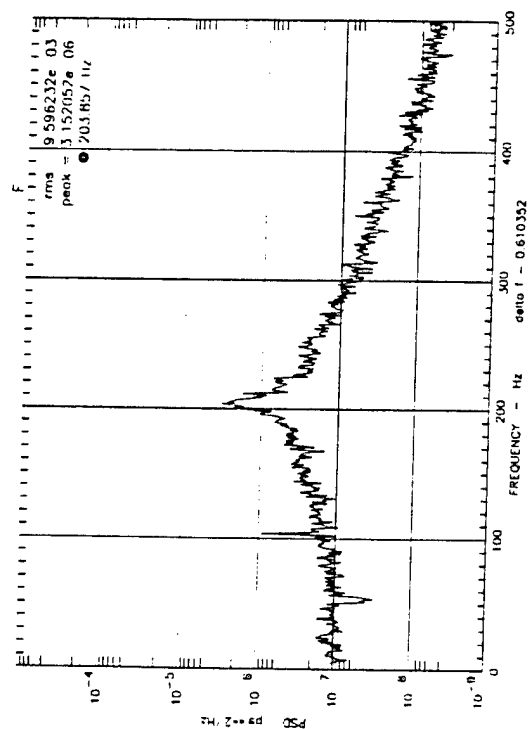
F 15 TPN 3357: alpha=20 beta=4 bp=45



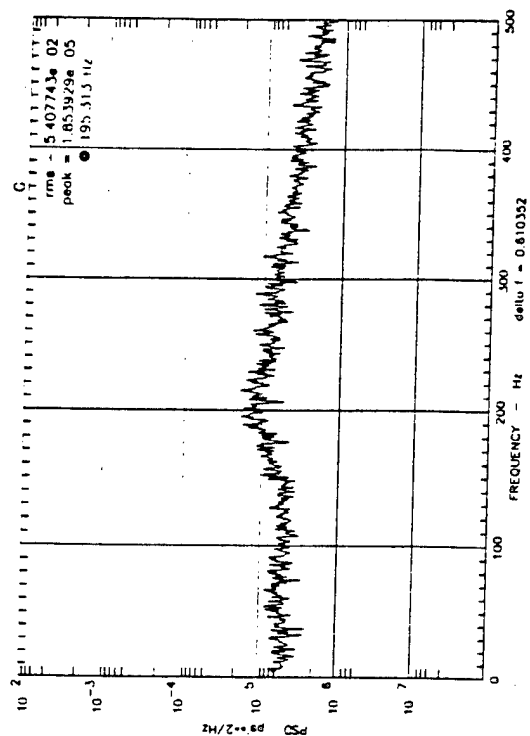
F 15 TPN 3357: alpha=20 beta=4 bp=45



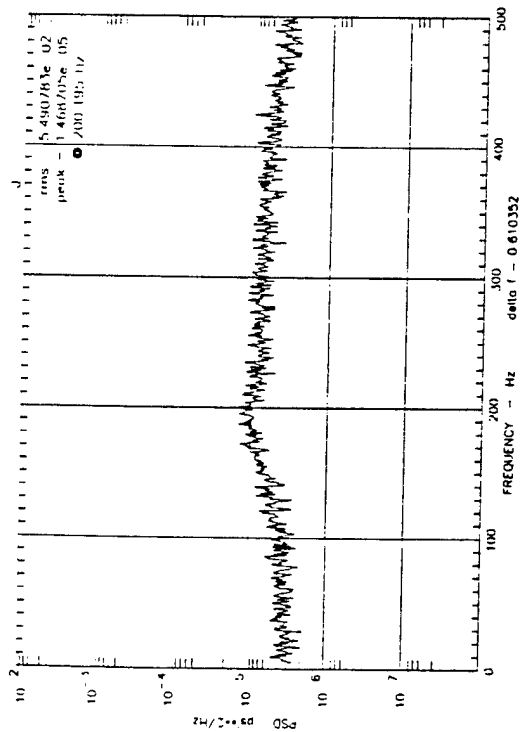
F 15 TPN 3357: alpha=20 beta=4 bp=45



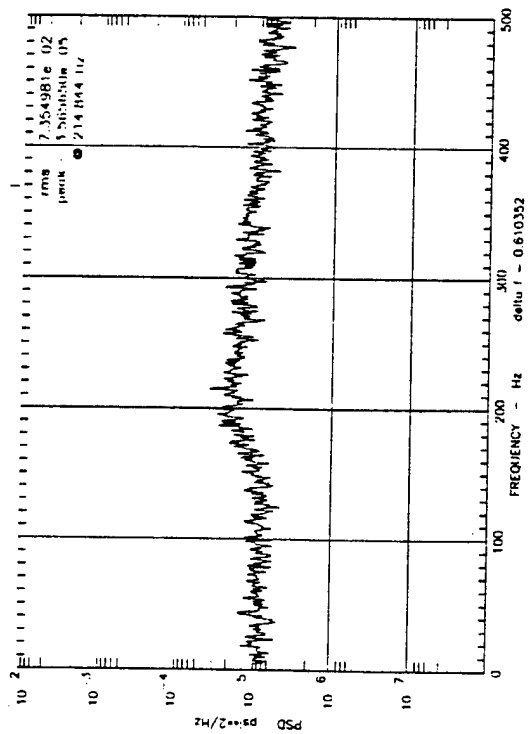
F 15 TPN 3357: alpha=20 beta=4 bp=45



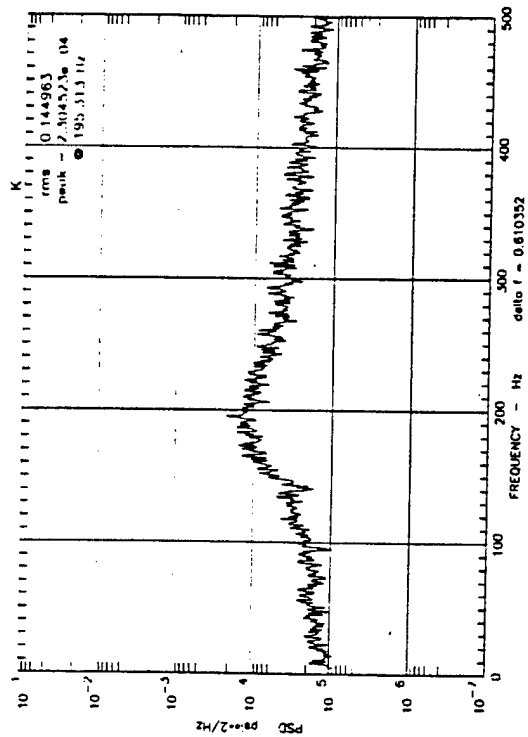
F 15 TPN 3357: alpha=20 beta=4 bp=45



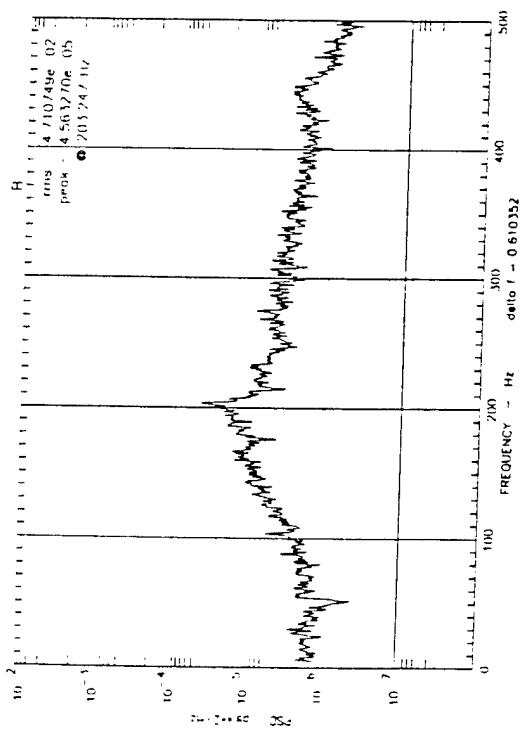
F 15 TPN 3357: alpha=20 beta=4 bp=45



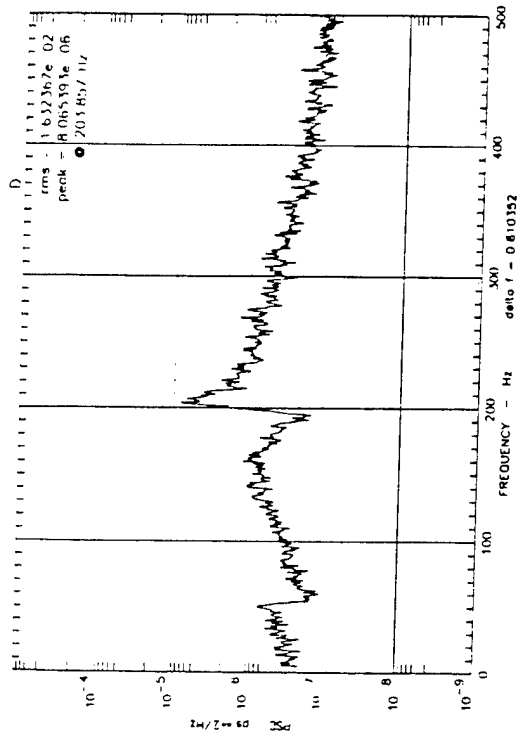
F 15 TPN 3357: alpha=20 beta=4 bp=45



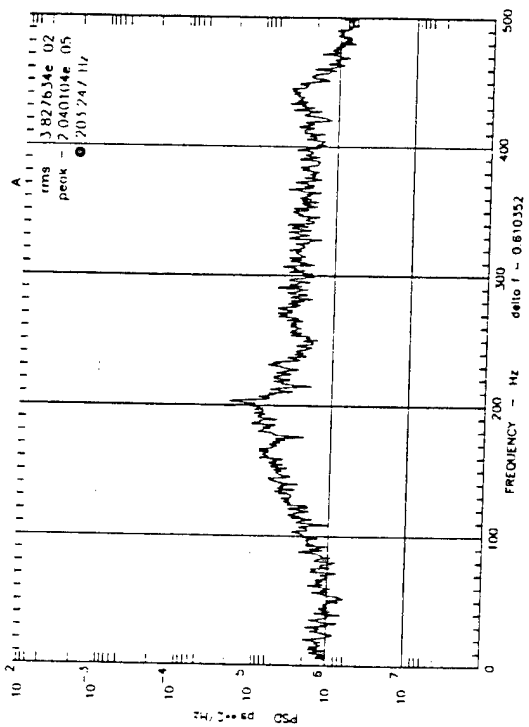
I 15 ITPN 3359, alpha=24 beta=4 bp=45



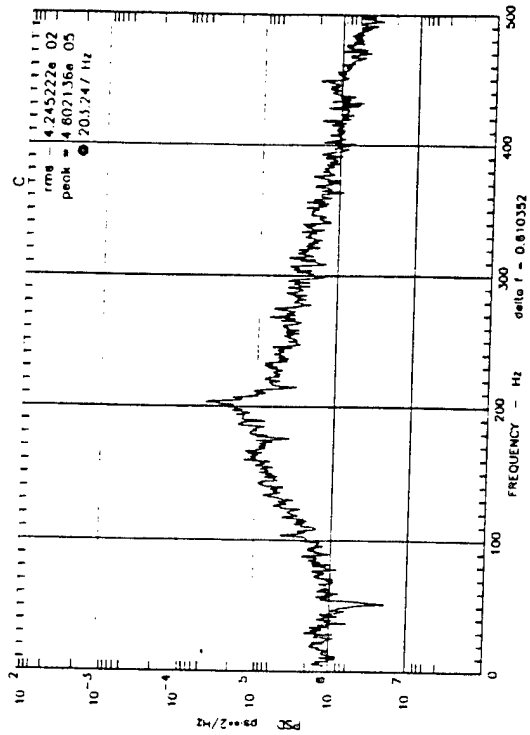
I 15 ITPN 3359, alpha=24 beta=4 bp=45



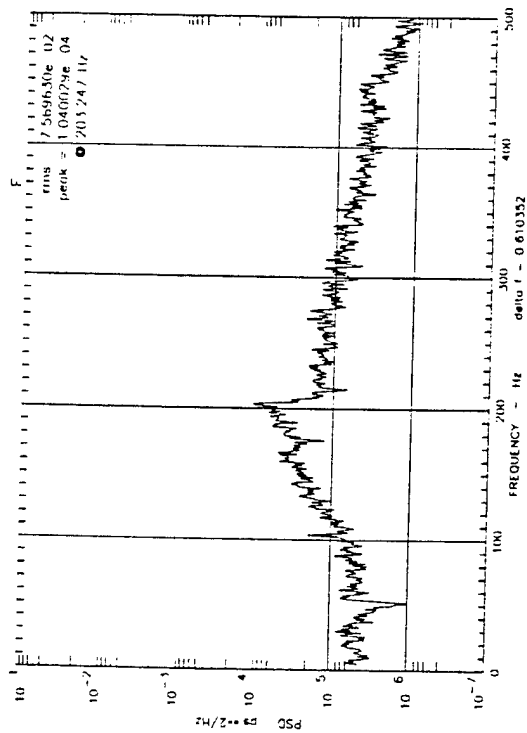
F 15 ITPN 3359, alpha=24 beta=4 bp=45



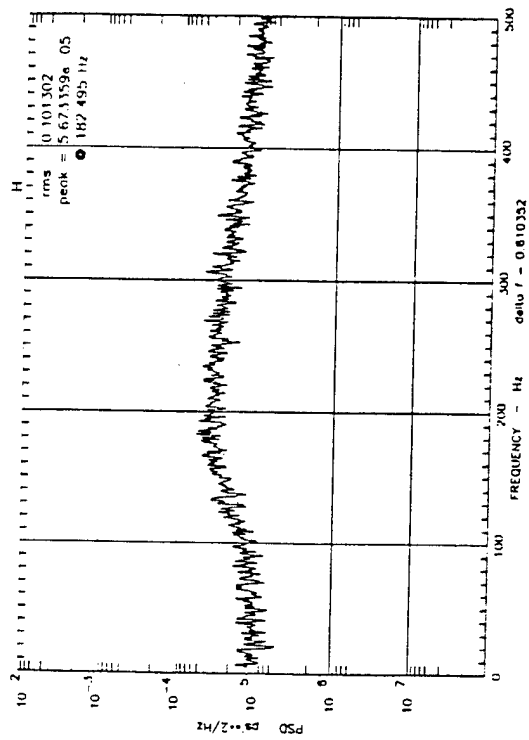
F 15 ITPN 3359, alpha=24 beta=4 bp=45



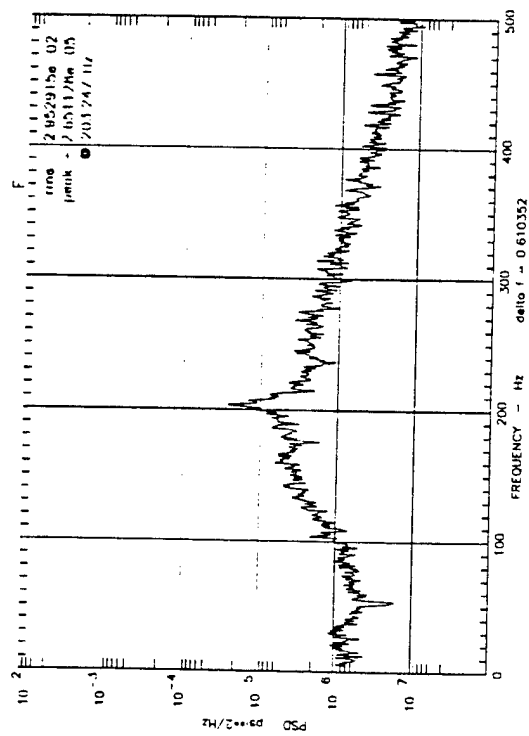
F 15 TPN 3359; alpha=24 beta=4 bp=45



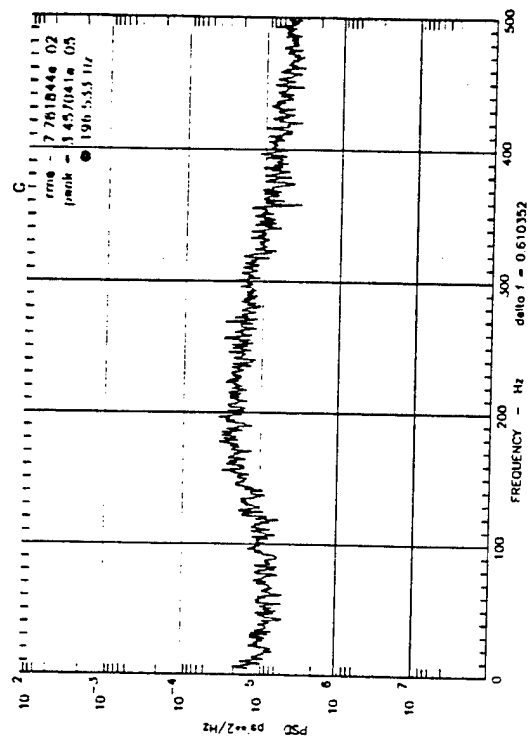
F 15 TPN 3359; alpha=24 beta=4 bp=45



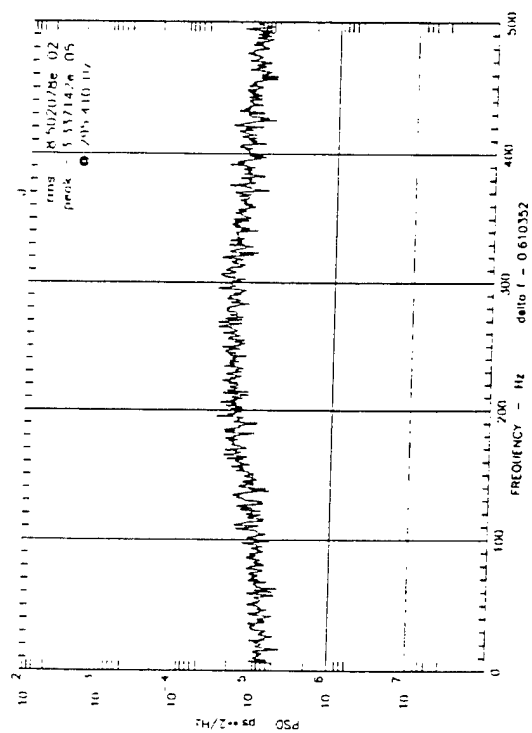
F 15 TPN 3359; alpha=24 beta=4 bp=45



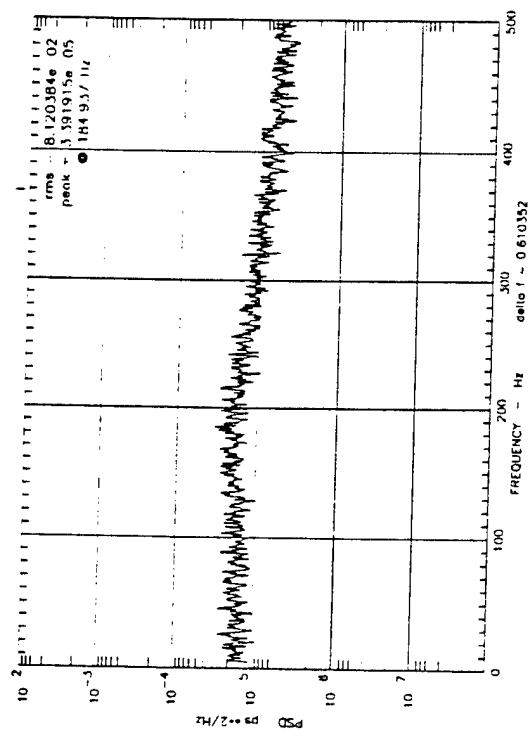
F 15 TPN 3359; alpha=24 beta=4 bp=45



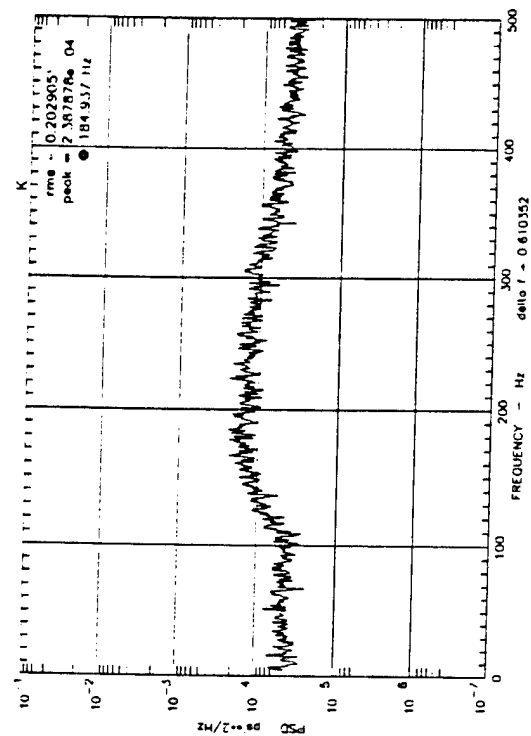
F 15 TPN 3359: alpha=24 beta=4 bp=45



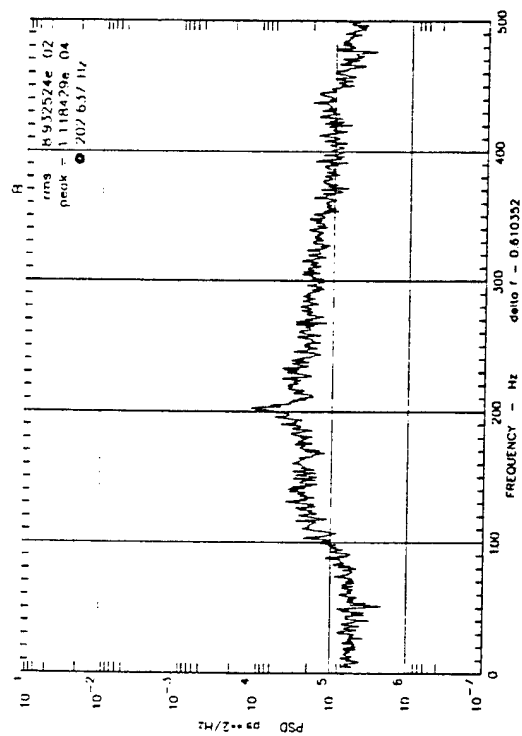
F 15 TPN 3359: alpha=24 beta=4 bp=45



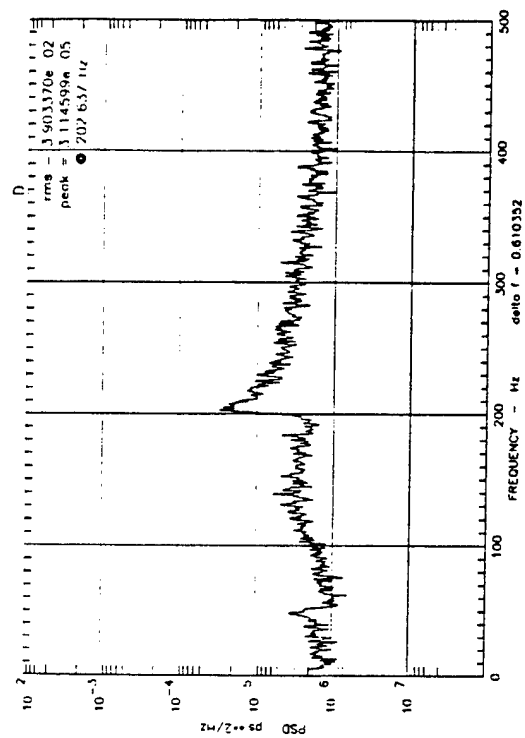
F 15 TPN 3359: alpha=24 beta=4 bp=45



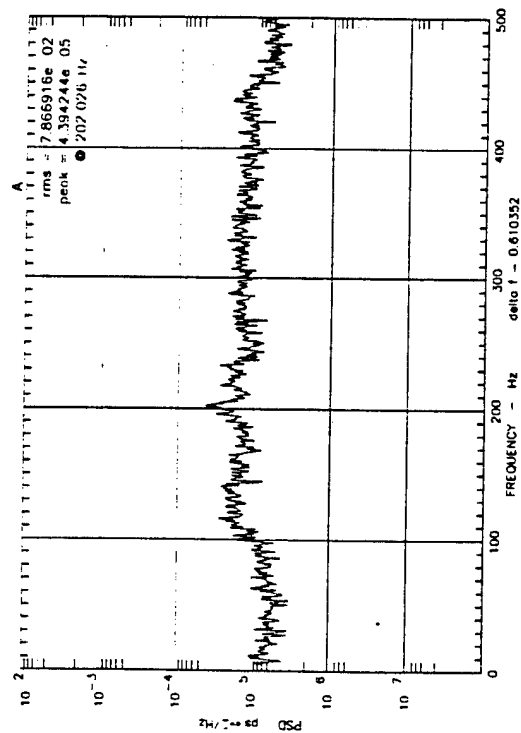
F 15 TPN .3360: alpha=28 beta=4 bp=45



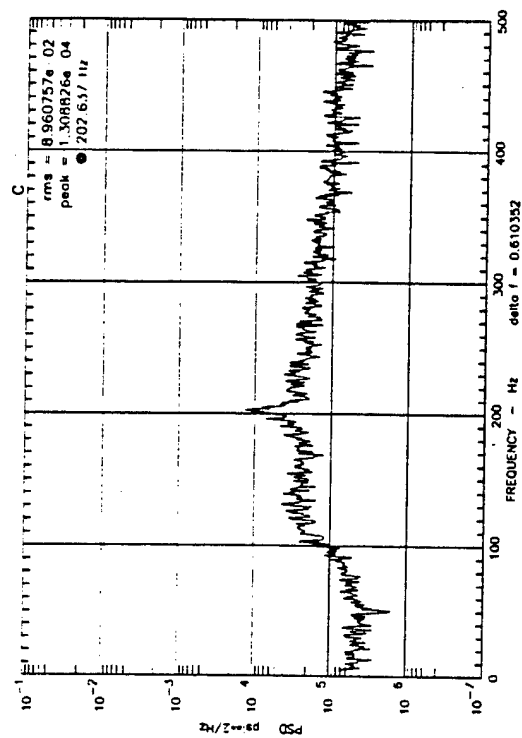
F 15 TPN .3360: alpha=28 beta=4 bp=45



F 15 TPN .3360: alpha=28 beta=4 bp=45

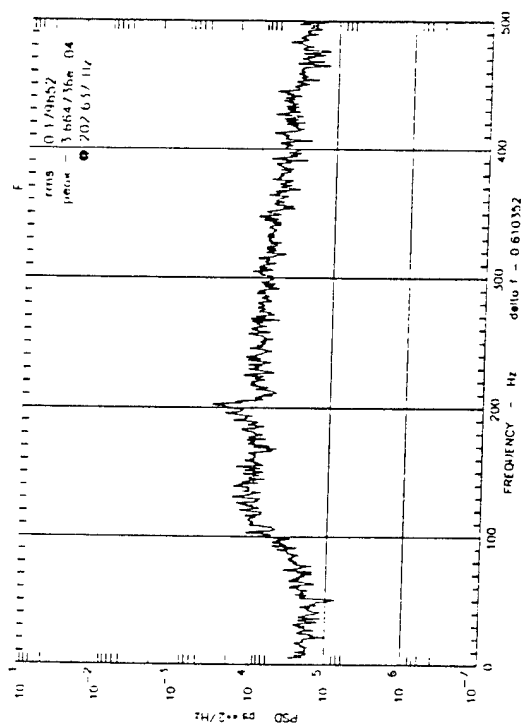


F 15 TPN .3360: alpha=28 beta=4 bp=45

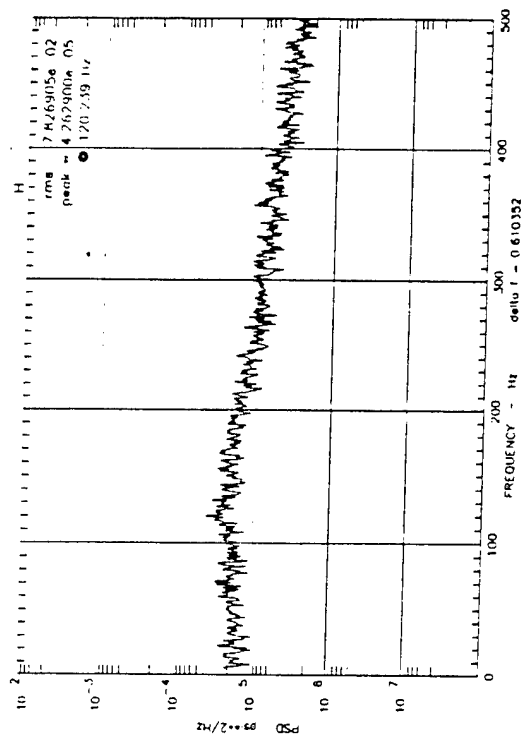




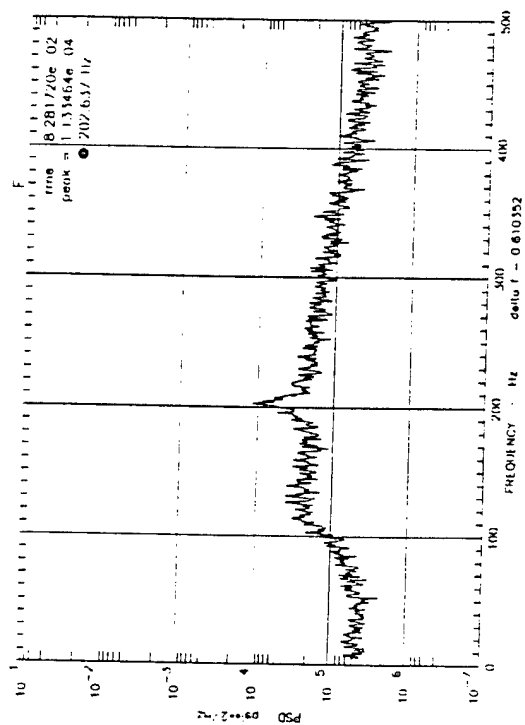
F 15 TPN 3360:  $\alpha=28$   $\beta=4$   $\text{bp}=45$



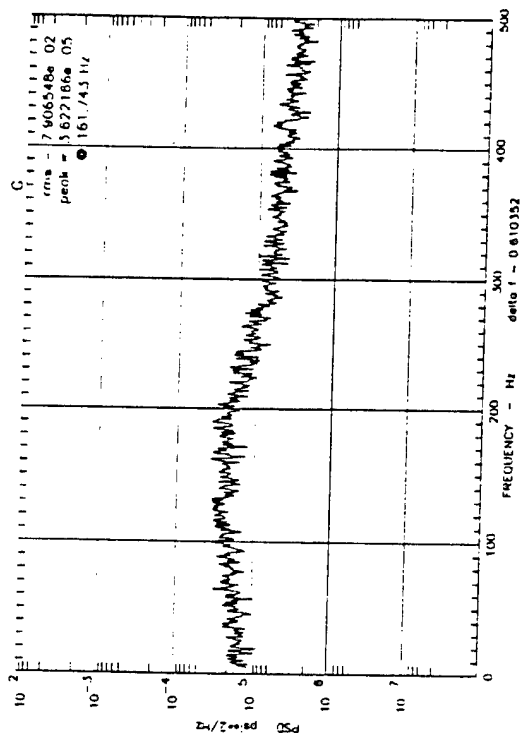
F 15 TPN 3360:  $\alpha=28$   $\beta=4$   $\text{bp}=45$



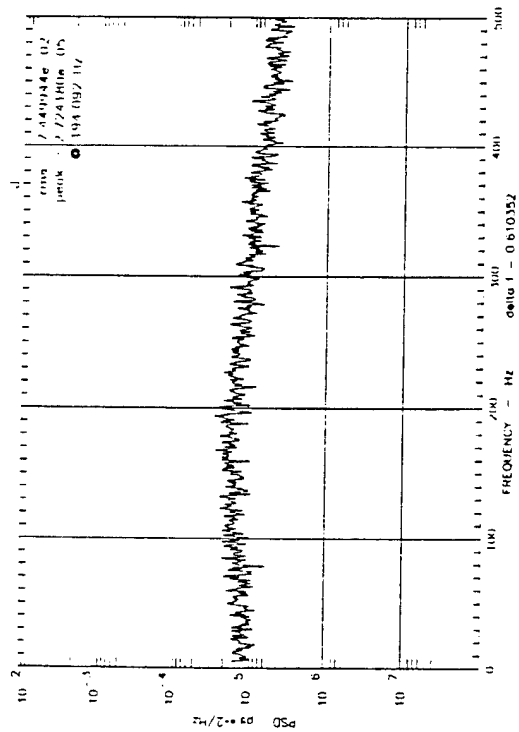
F 15 TPN 3360:  $\alpha=28$   $\beta=4$   $\text{bp}=45$



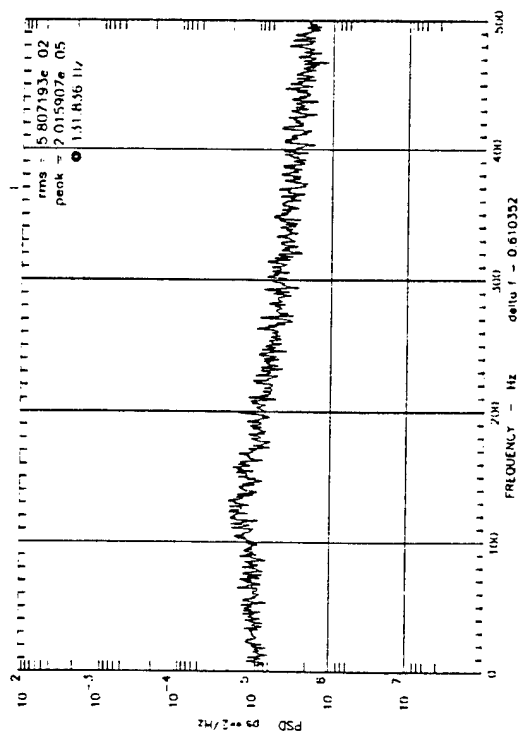
F 15 TPN 3360:  $\alpha=28$   $\beta=4$   $\text{bp}=45$



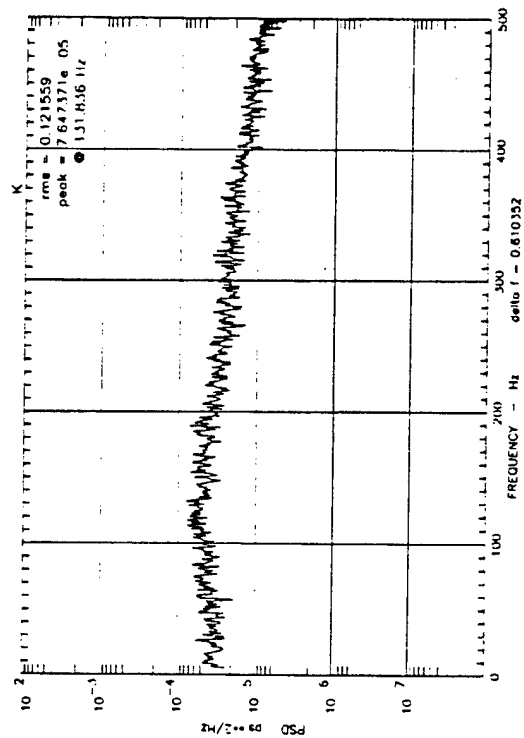
F 15 IPN 3360: alpha-28 beta=4 bp-45



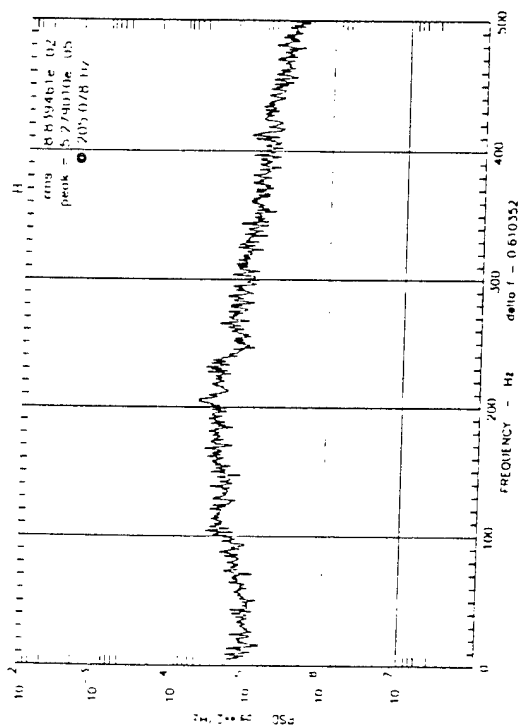
F 15 IPN 3360: alpha 28 beta 4 bp 45



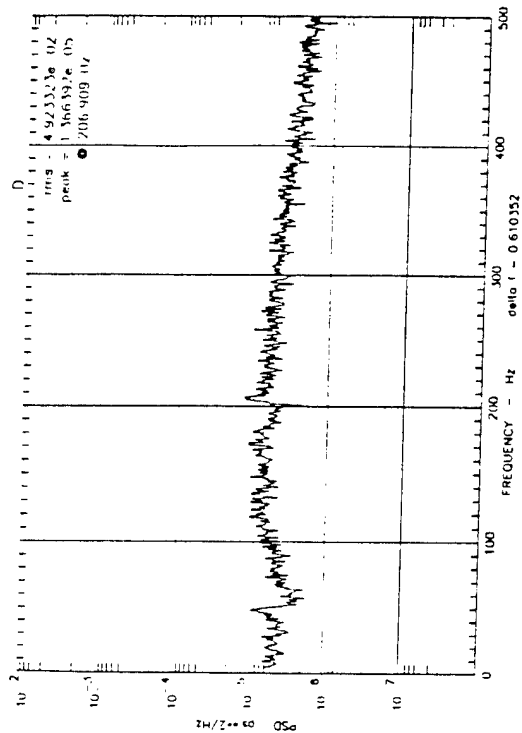
F 15 IPN 3360: alpha-28 beta=4 bp-45



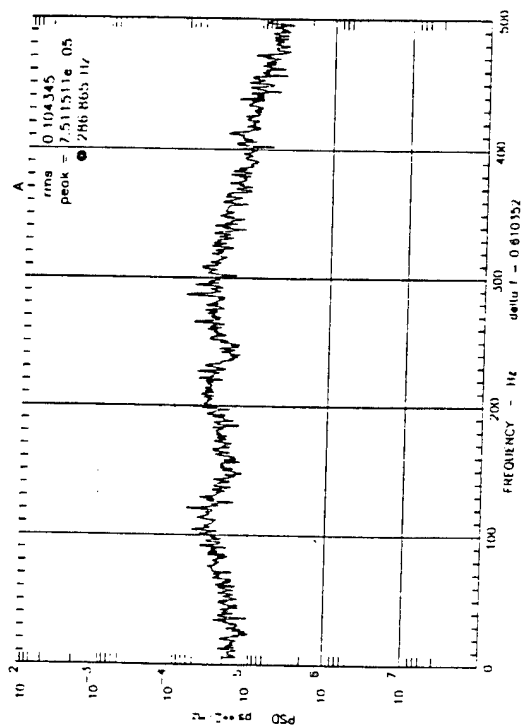
F 15 TPN 3361: alpha=32 beta=4 bp=45



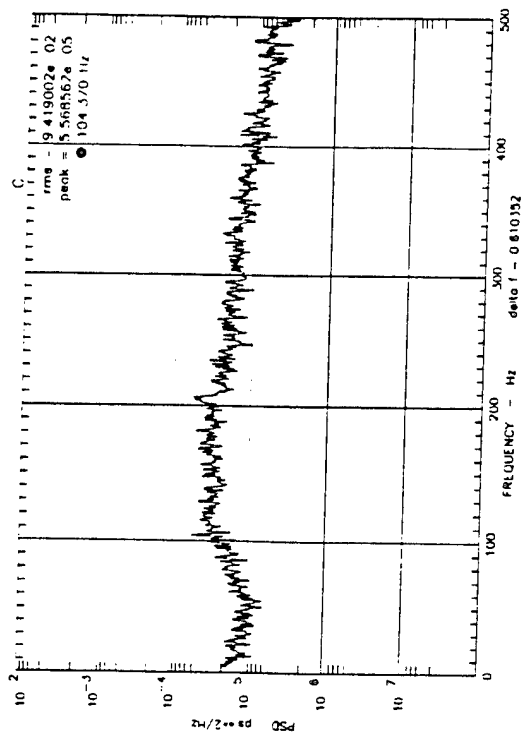
F 15 TPN 3361: alpha=32 beta=4 bp=45



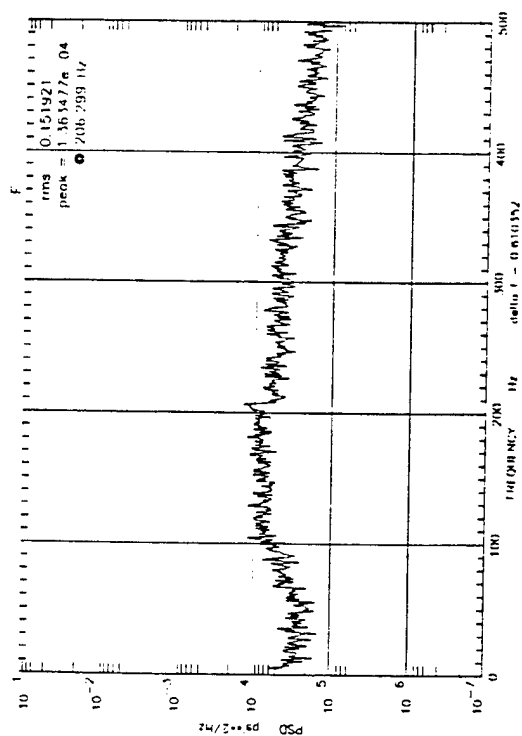
F 15 TPN 3361: alpha=32 beta=4 bp=45



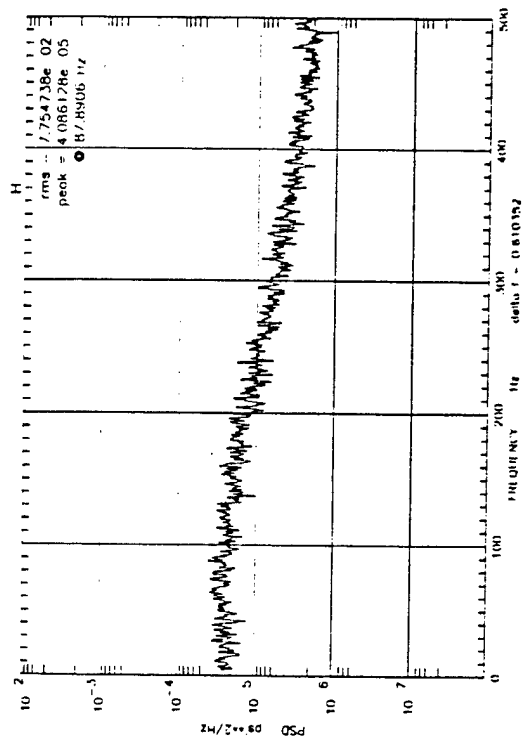
F 15 TPN 3361: alpha=32 beta=4 bp=45



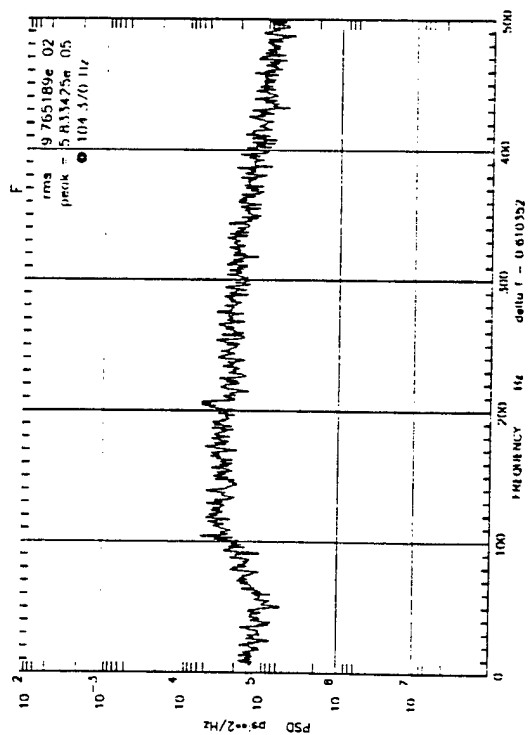
F 15 TPN 3361: alpha=32 beta=4 bp=45



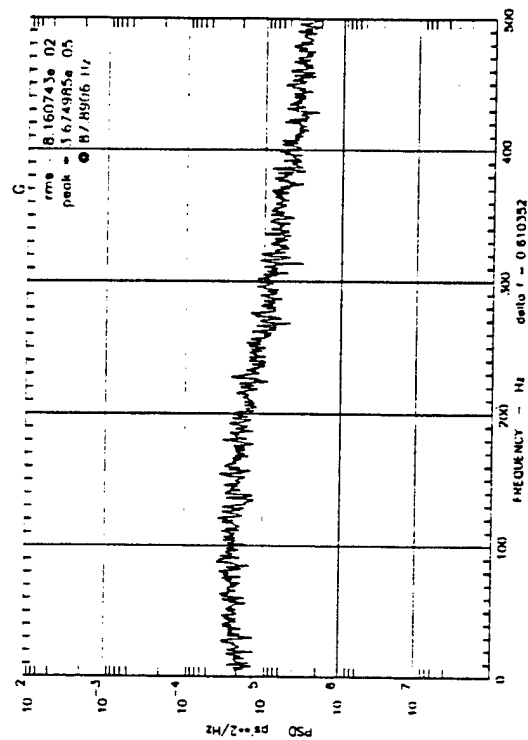
F 15 TPN 3361: alpha=32 beta=4 bp=45



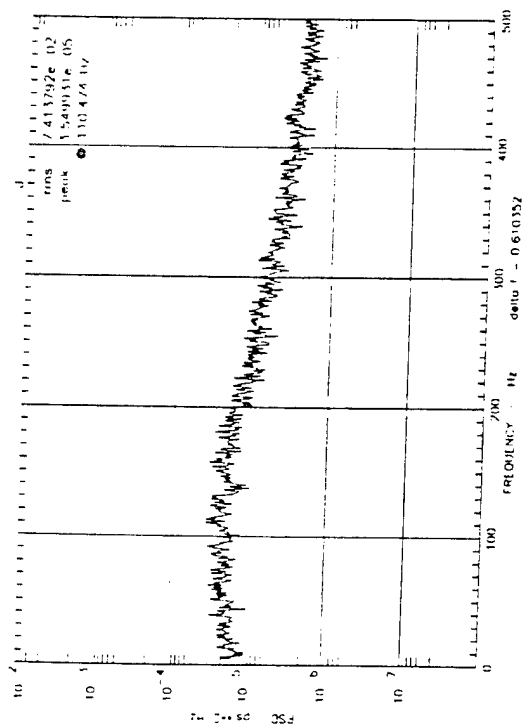
F 15 TPN 3361: alpha=32 beta=4 bp=45



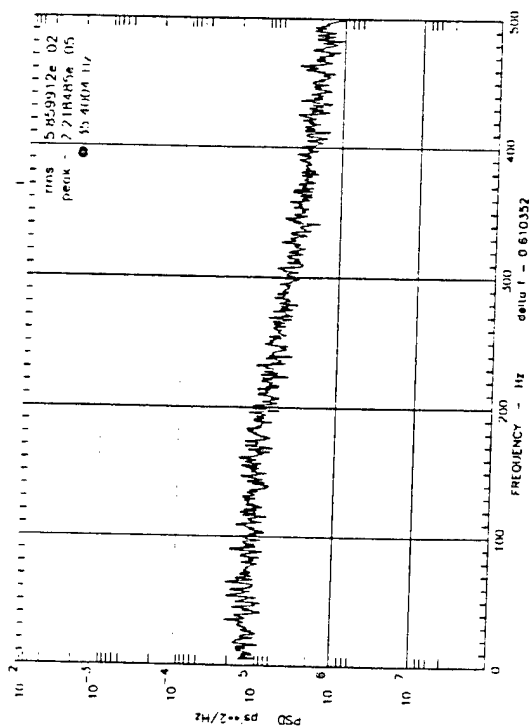
F 15 TPN 3361: alpha=32 beta=4 bp=45



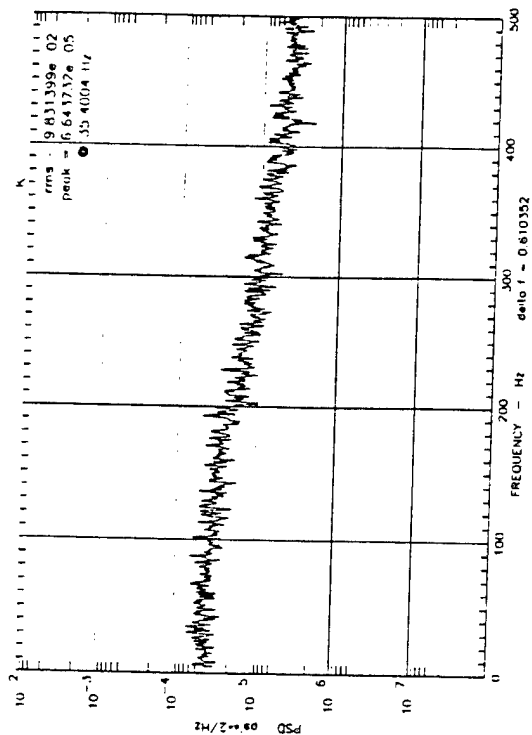
F 15 TPN 3361: alpha=32 beta=4 bp=45



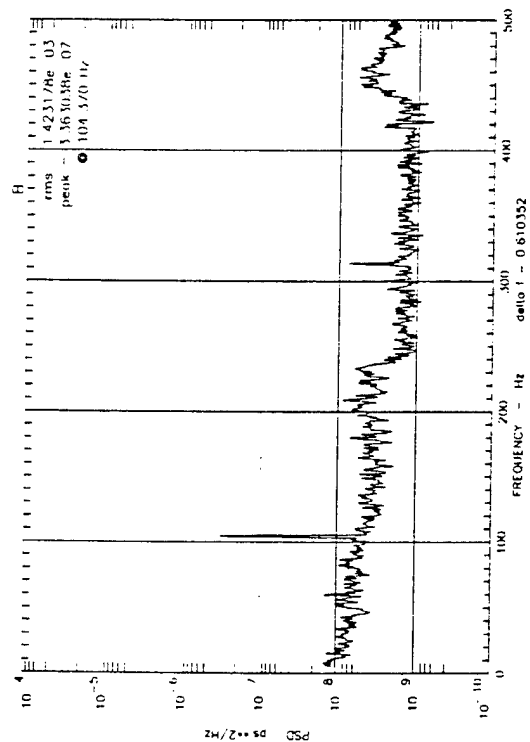
F 15 TPN 3361: alpha=32 beta=4 bp=45



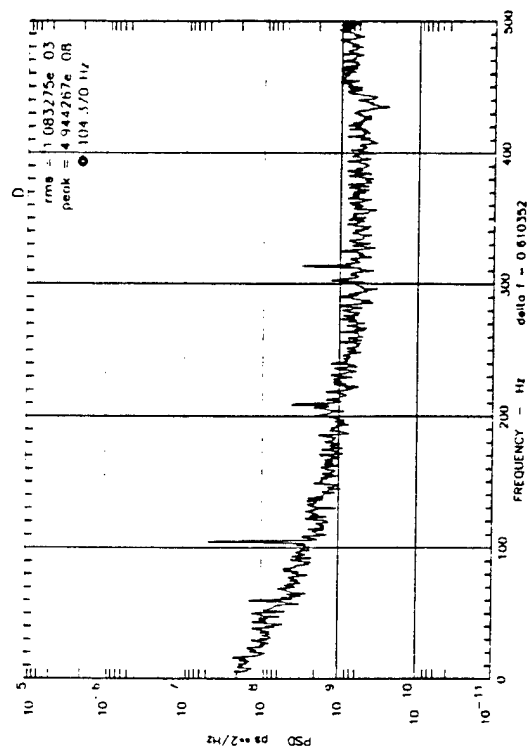
F 15 TPN 3361: alpha=32 beta=4 bp=45



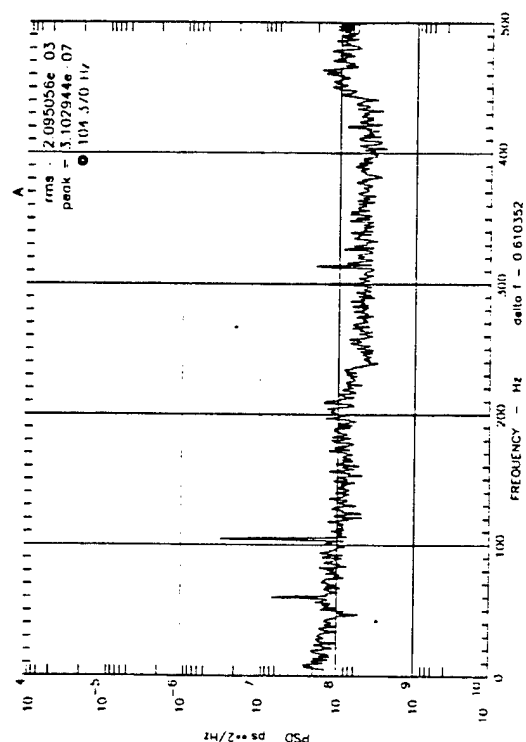
F 15 TPN 3333; alpha=8 beta=0 bp=45



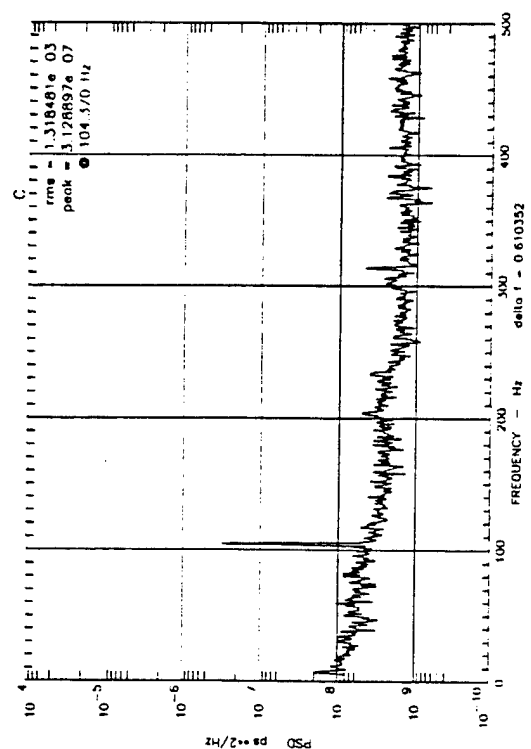
F 15 TPN 3333; alpha=8 beta=0 bp=45



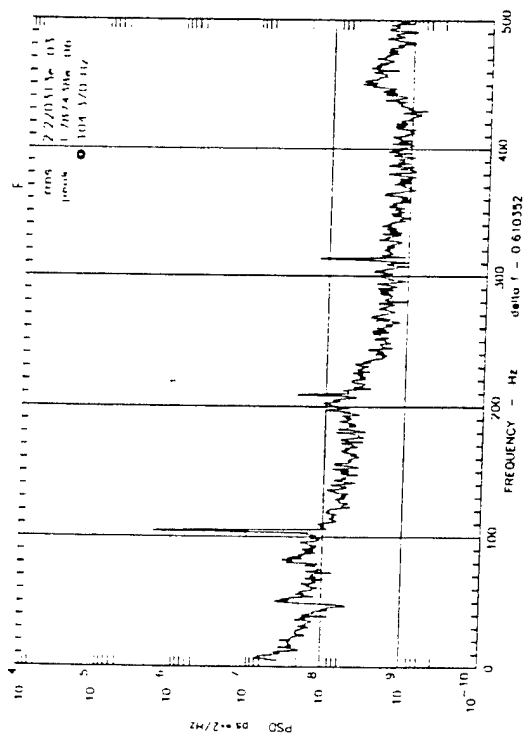
F 15 TPN 3333; alpha=8 beta=0 bp=45



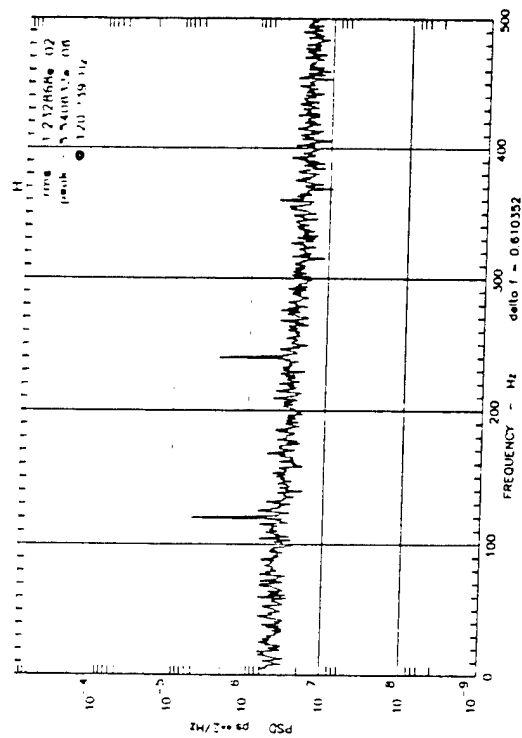
F 15 TPN 3333; alpha=8 beta=0 bp=45



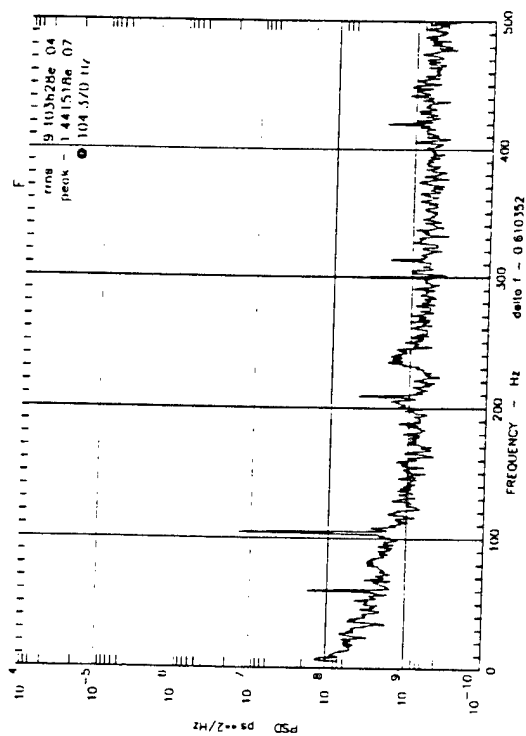
F 15 IPN 3333: alpha-B beta=0 bp-45



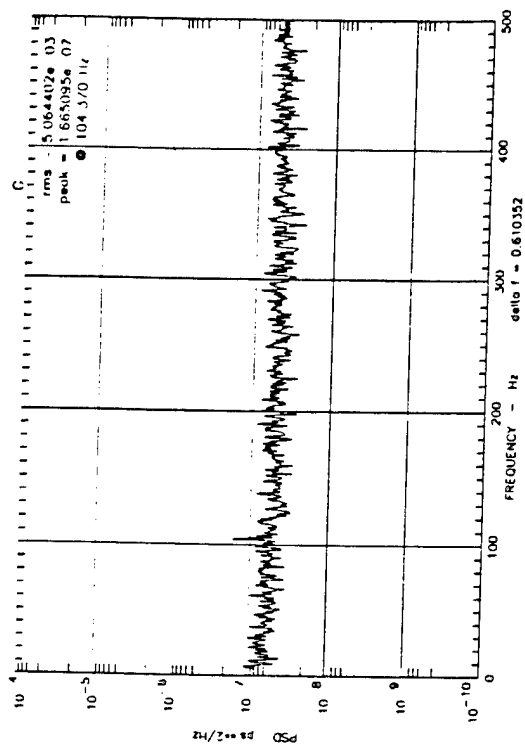
F 15 IPN 3333: alpha-B beta=0 bp-45



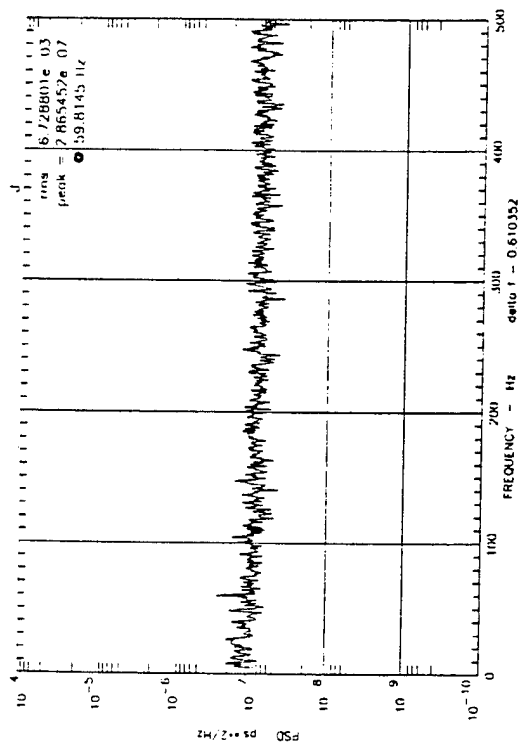
F 15 IPN 3333: alpha-B beta=0 bp-45



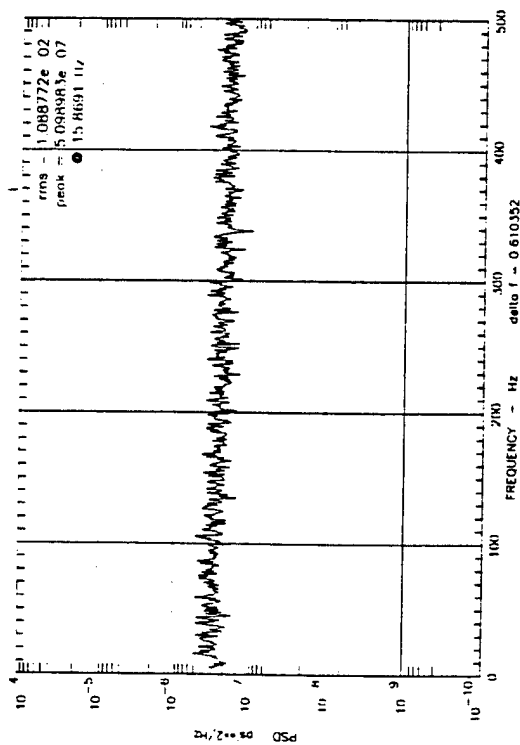
F 15 IPN 3333: alpha-B beta=0 bp-45



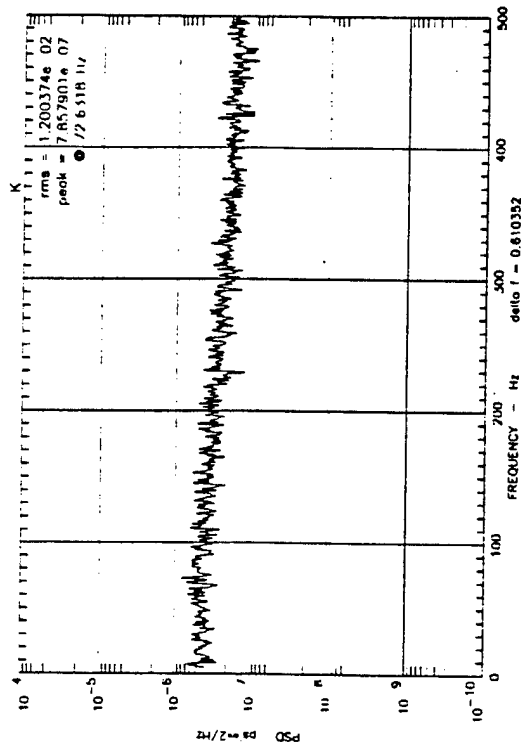
F 15 IPN 3333: alpha=8 beta=0 bp=45



F 15 IPN 3333: alpha=8 beta=0 bp=45

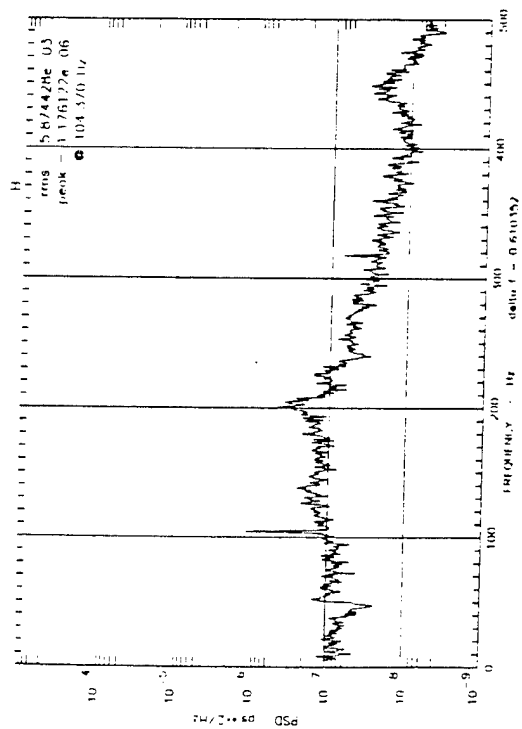


F 15 IPN 3333: alpha=8 beta=0 bp=45

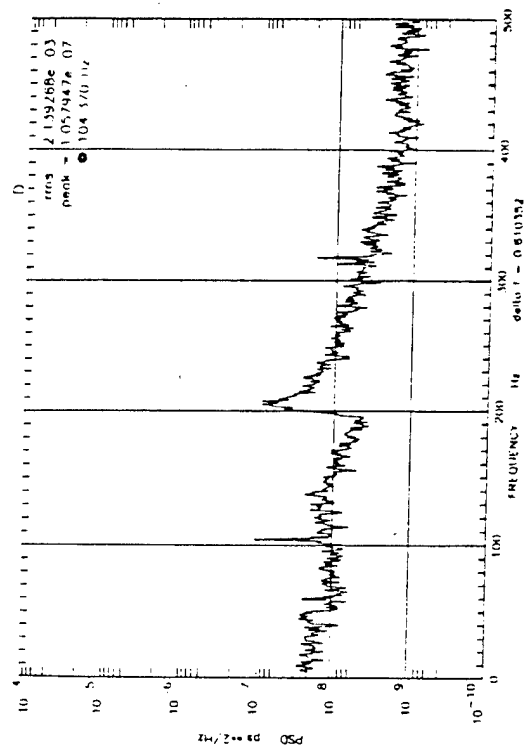




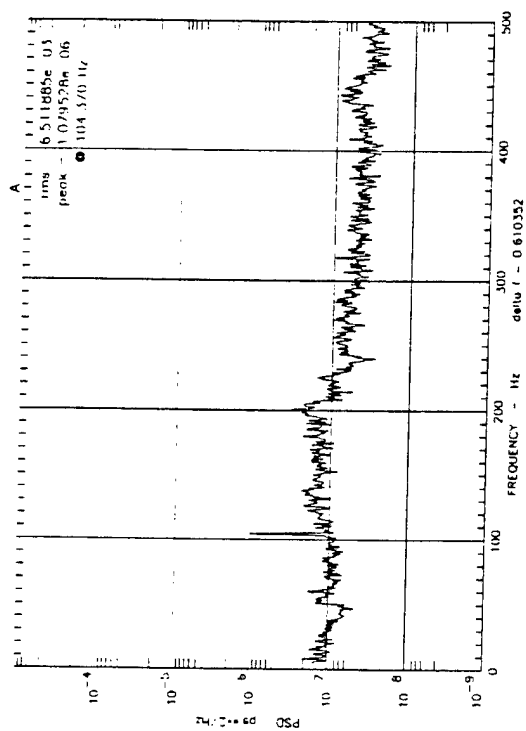
F 15 TPN 3337: alpha=16 beta=0 bp=45



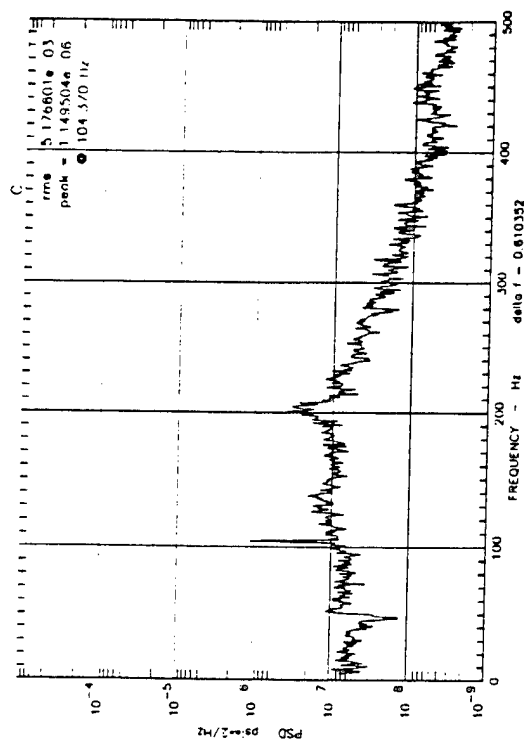
F 15 TPN 3337: alpha=16 beta=0 bp=45



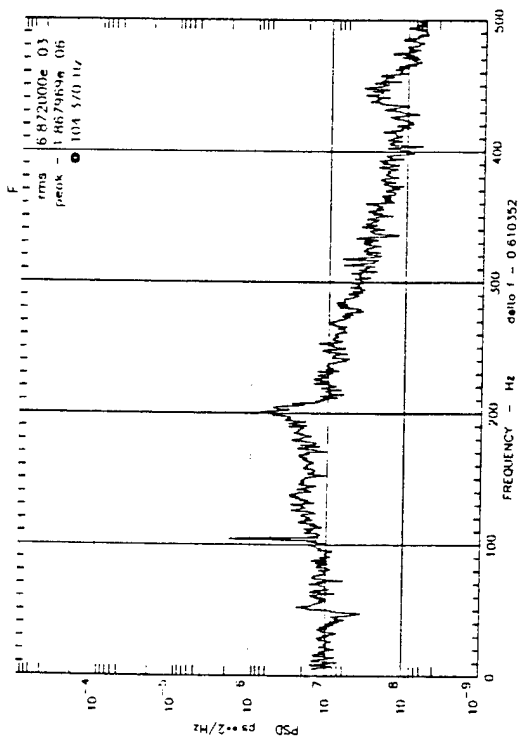
F 15 TPN 3337: alpha=16 beta=0 bp=45



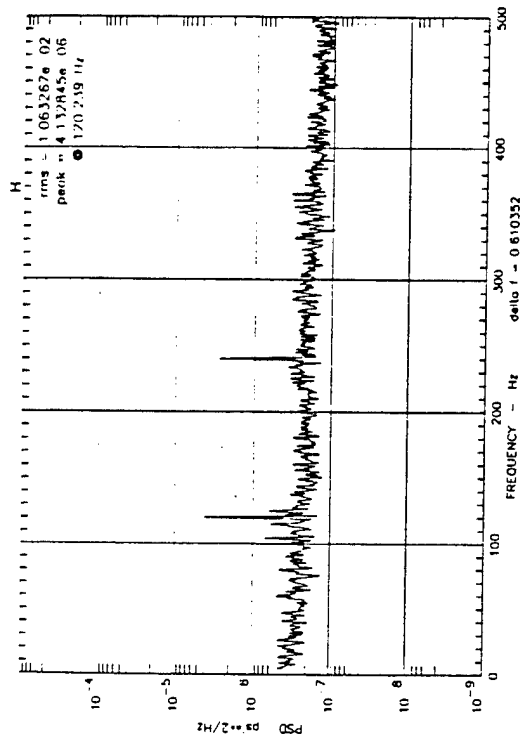
F 15 TPN 3337: alpha=16 beta=0 bp=45



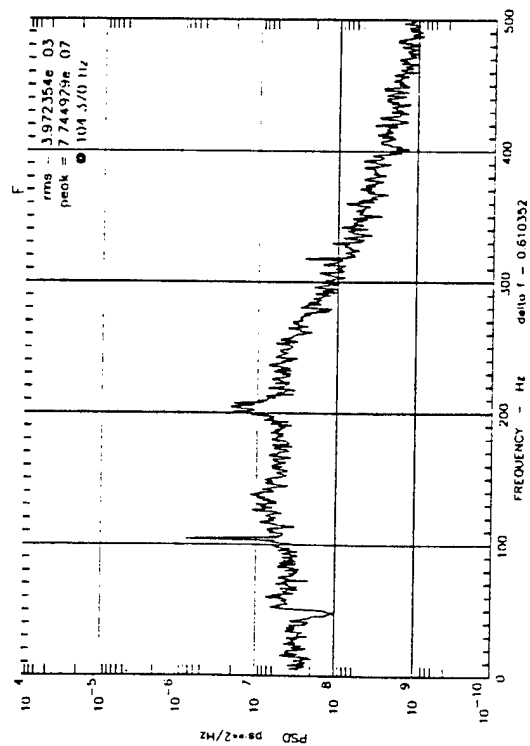
F 15 TPN 3337: alpha=16 beta=0 bp=45



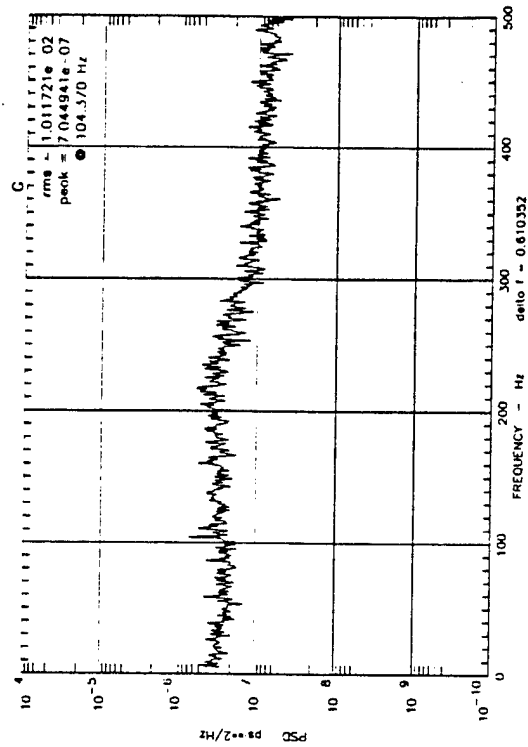
F 15 TPN 3337: alpha=16 beta=0 bp=45



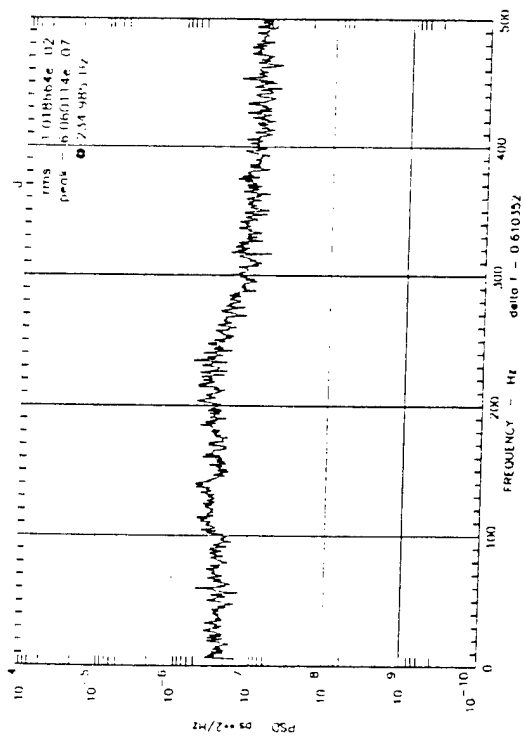
F 15 TPN 3337: alpha=16 beta=0 bp=45



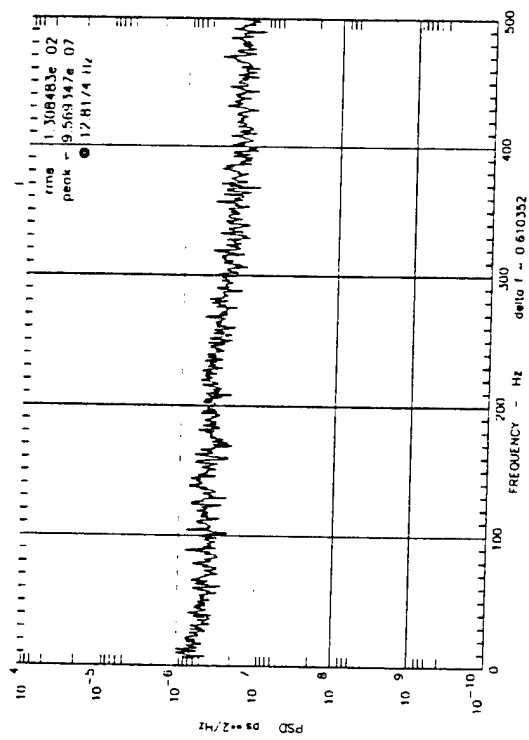
F 15 TPN 3337: alpha=16 beta=0 bp=45



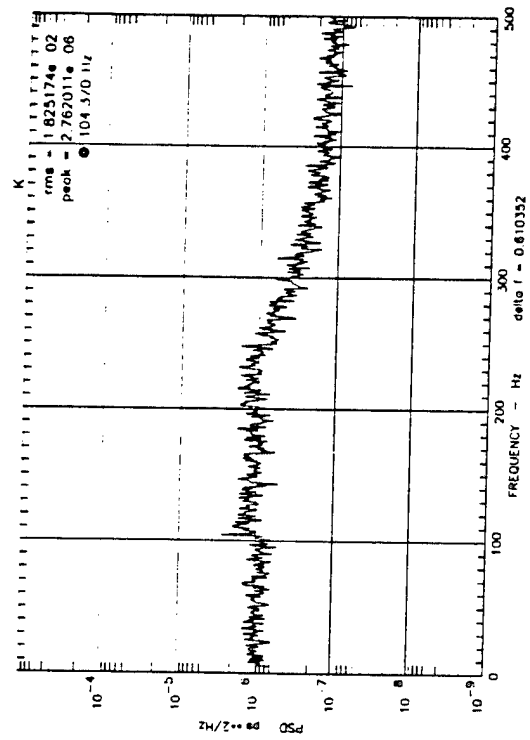
F 15 TPN 3337: alpha=16 beta=0 bp=45



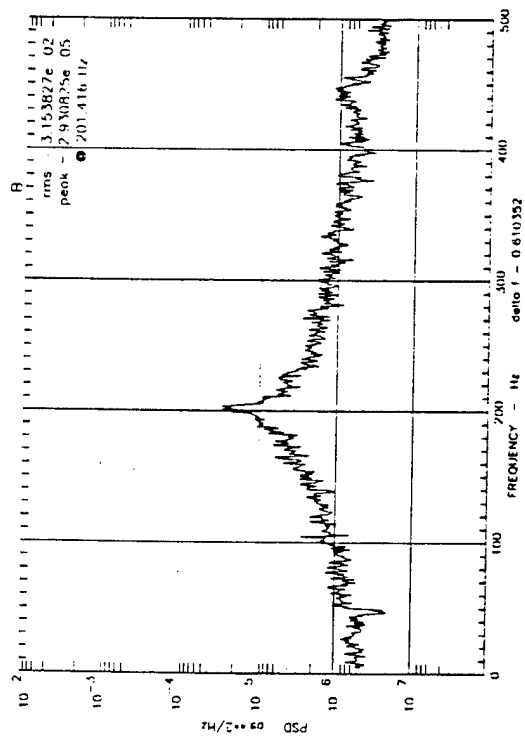
F 15 TPN 3337: alpha=16 beta=0 bp=45



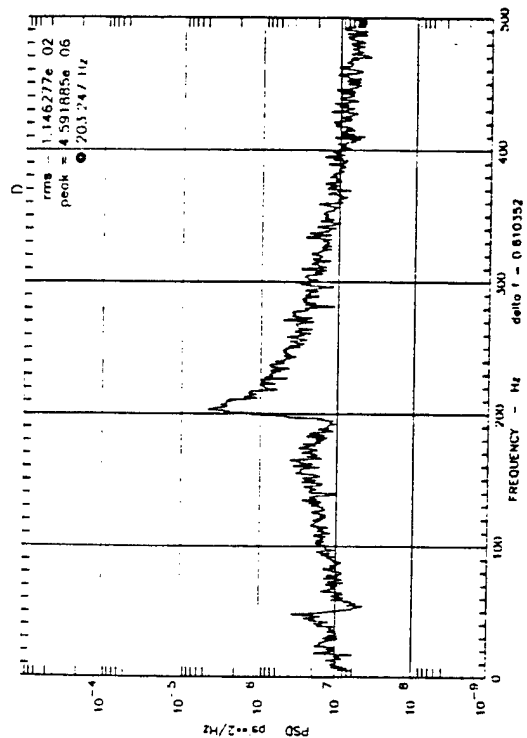
F 15 TPN 3337: alpha=16 beta=0 bp=45



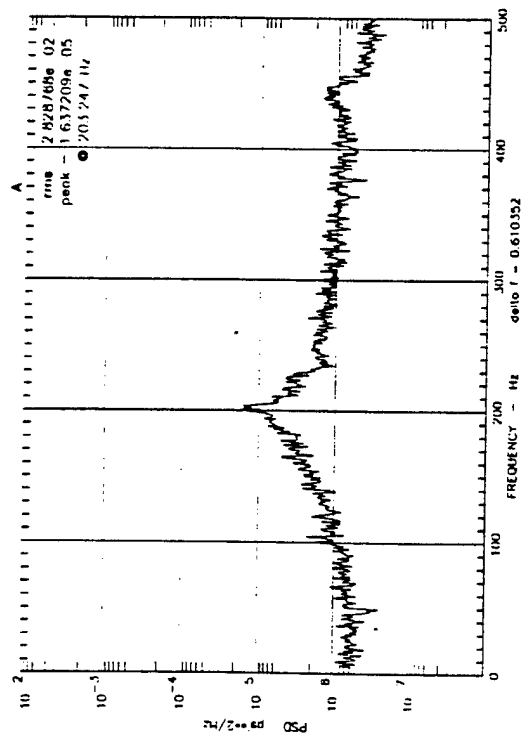
F 15 TPN 3339: alpha=20 beta=0 bp=45



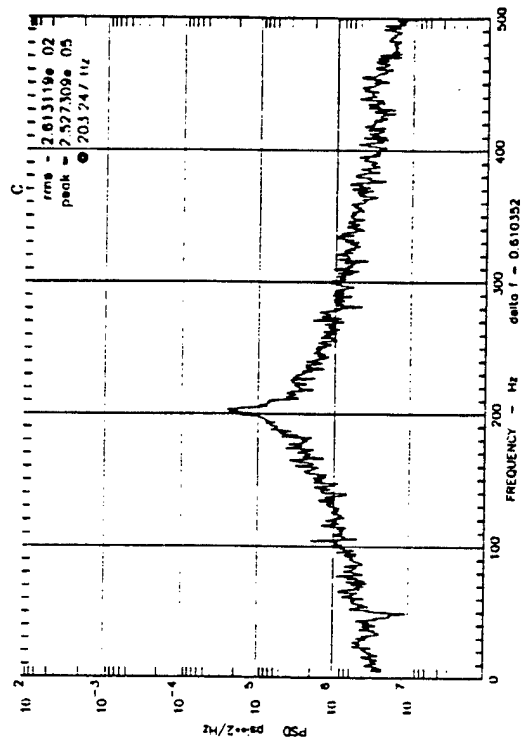
F 15 TPN 3339: alpha=20 beta=0 bp=45



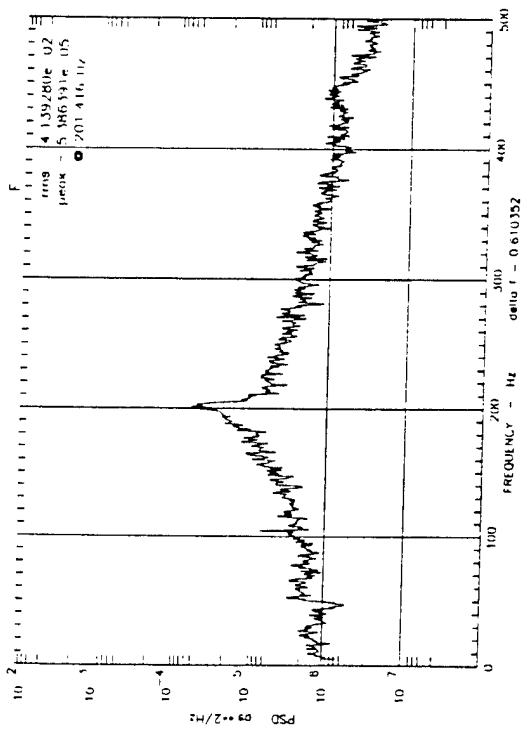
F 15 TPN 3339: alpha=20 beta=0 bp=45



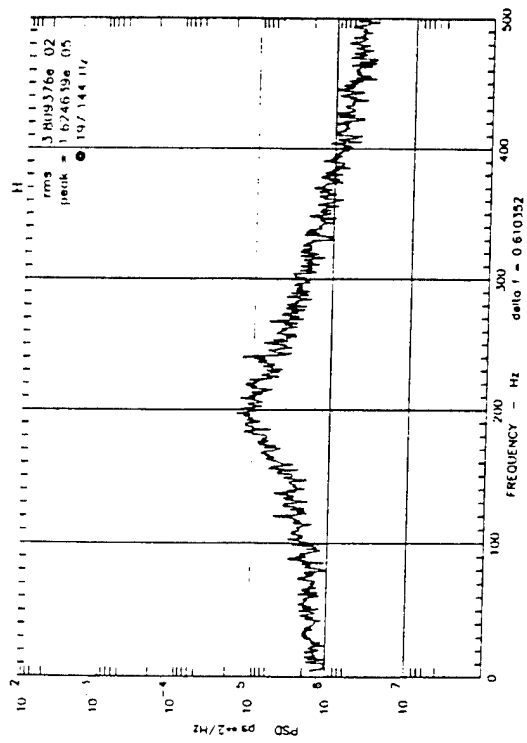
F 15 TPN 3339: alpha=20 beta=0 bp=45



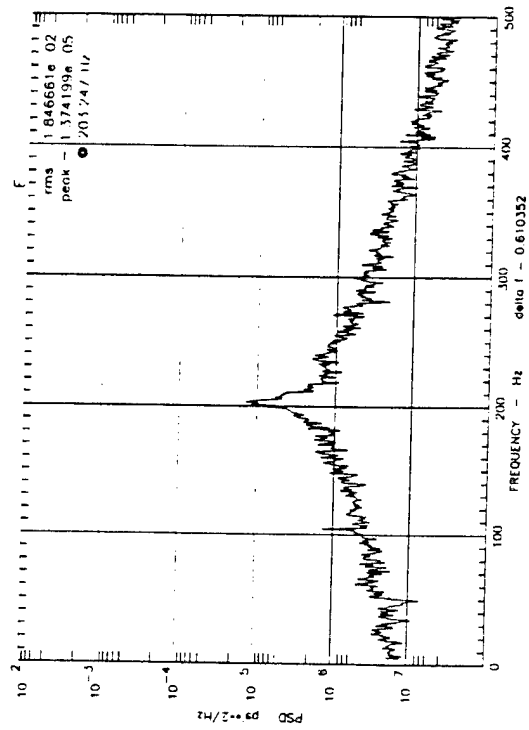
F 1.5 IPN 3339; alpha=20 beta=0 bp=45



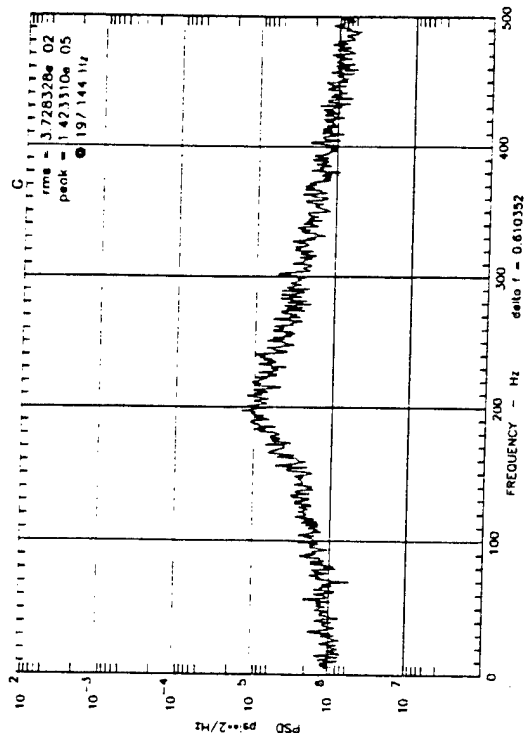
F 1.5 IPN 3339; alpha=20 beta=0 bp=45



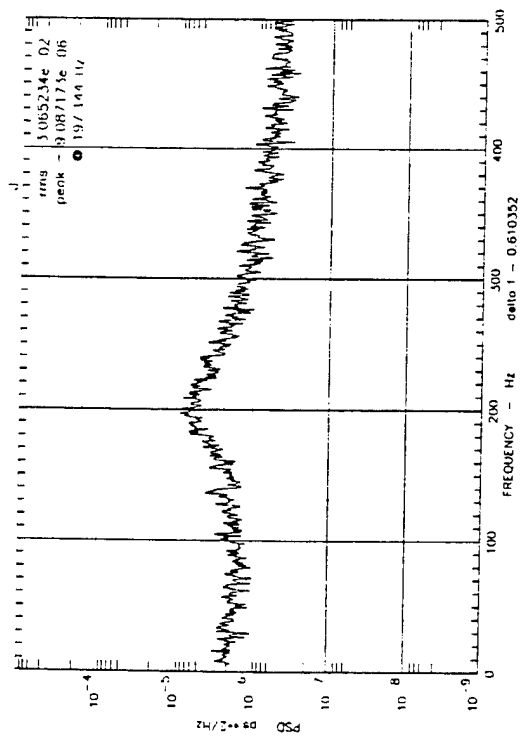
F 1.5 IPN 3339; alpha=20 beta=0 bp=45



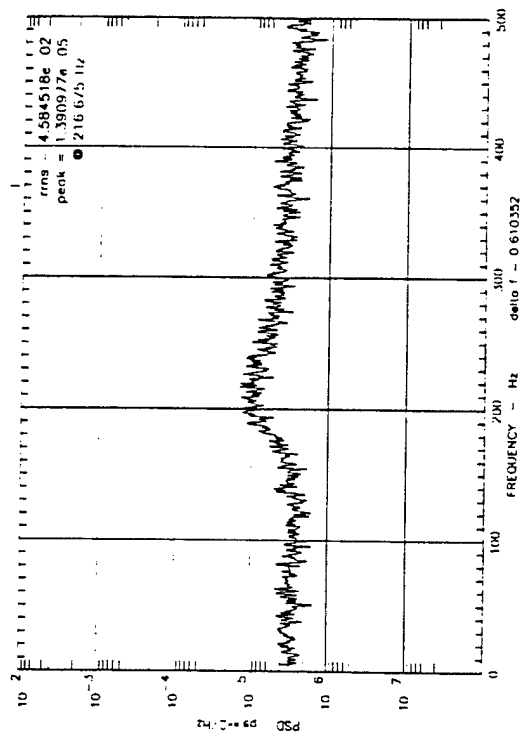
F 1.5 IPN 3339; alpha=20 beta=0 bp=45



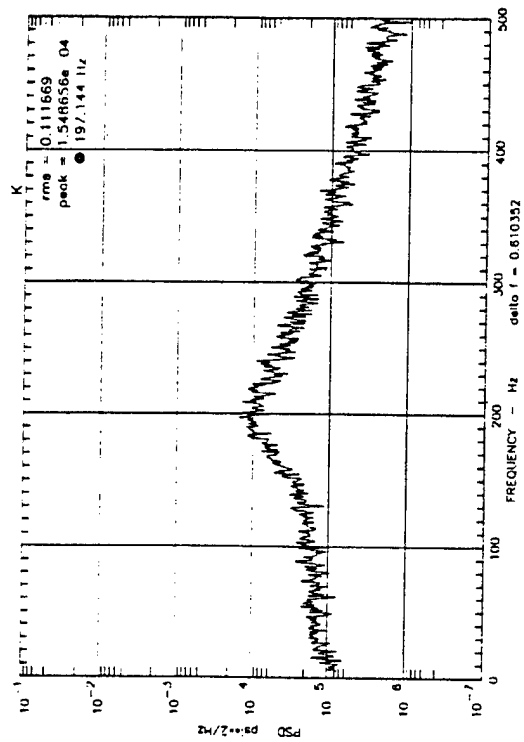
F 15 TPN 3339: alpha=20 beta=0 bp=45



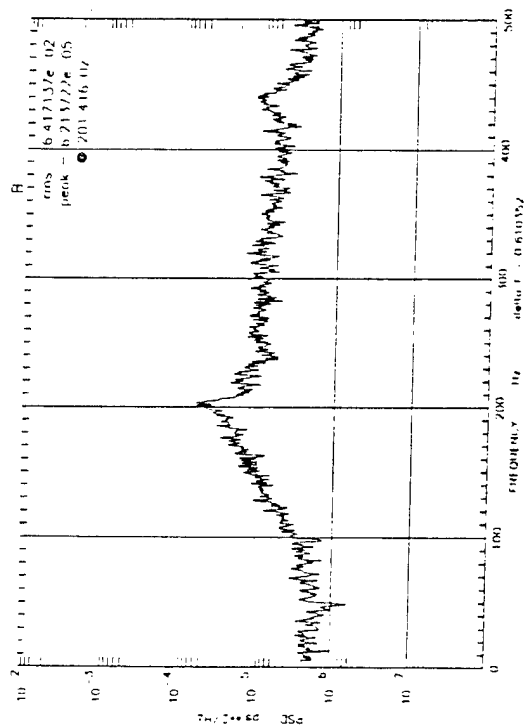
F 15 TPN 3339: alpha=20 beta=0 bp=45



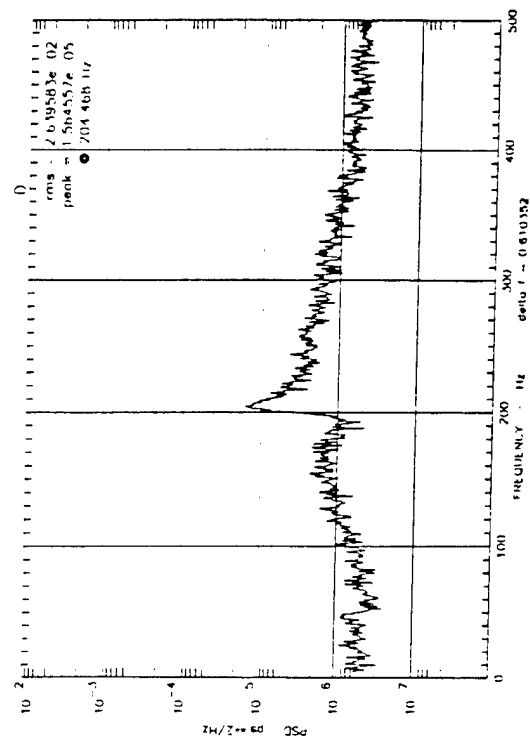
F 15 TPN 3339: alpha=20 beta=0 bp=45



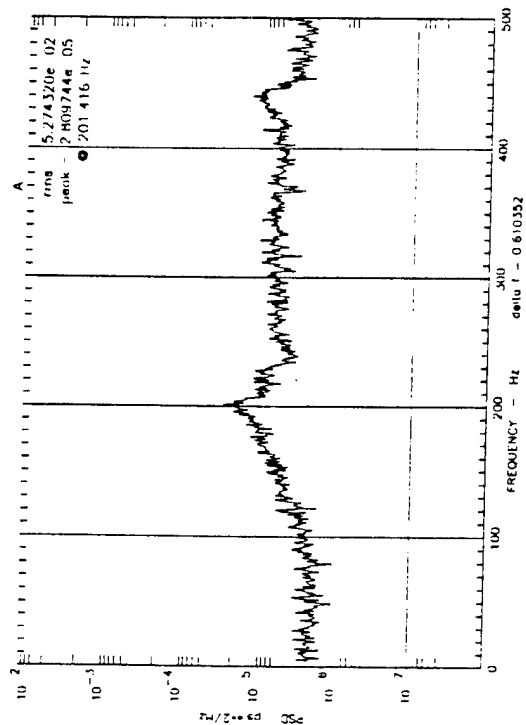
F 15 TPN 3341: alpha=24 beta=0 bp=45



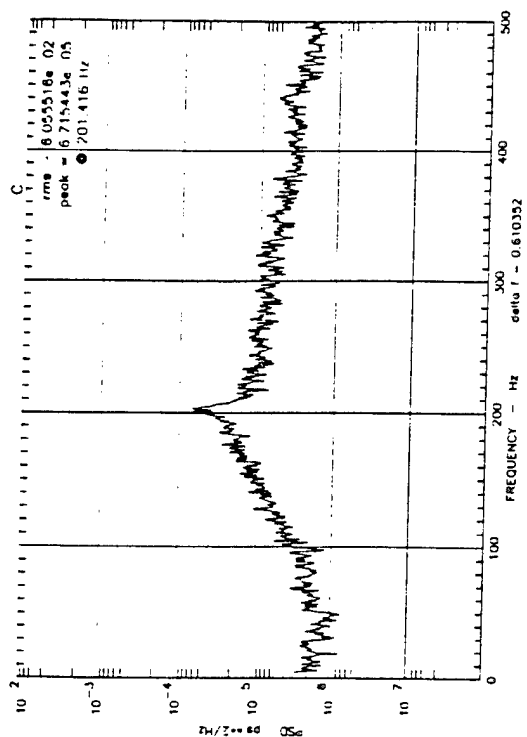
F 15 TPN 3341: alpha=24 beta=0 bp=45



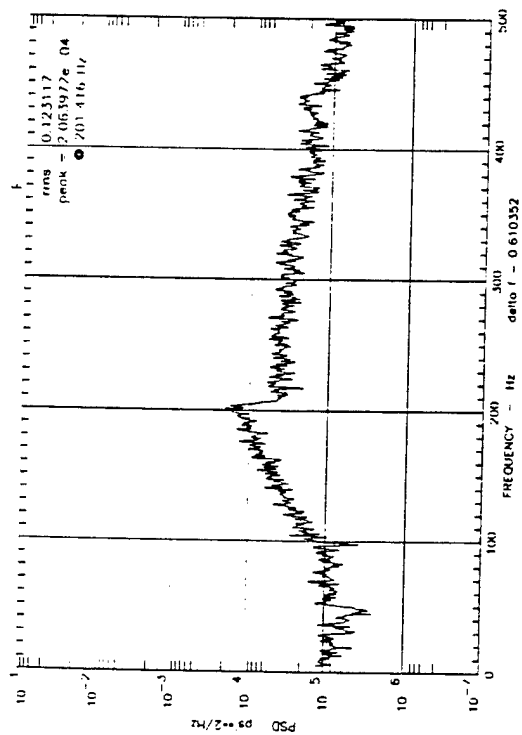
F 15 TPN 3341: alpha=24 beta=0 bp=45



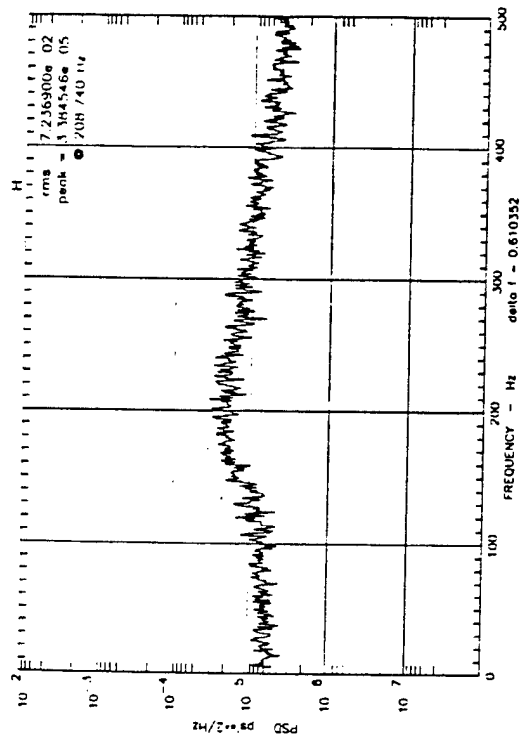
F 15 TPN 3341: alpha=24 beta=0 bp=45



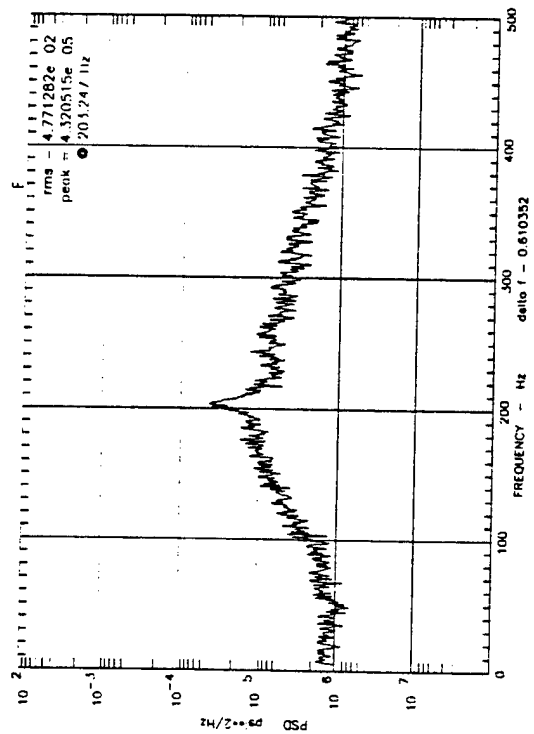
F 15 TPN 3341; alpha-24 beta=0 bp-45



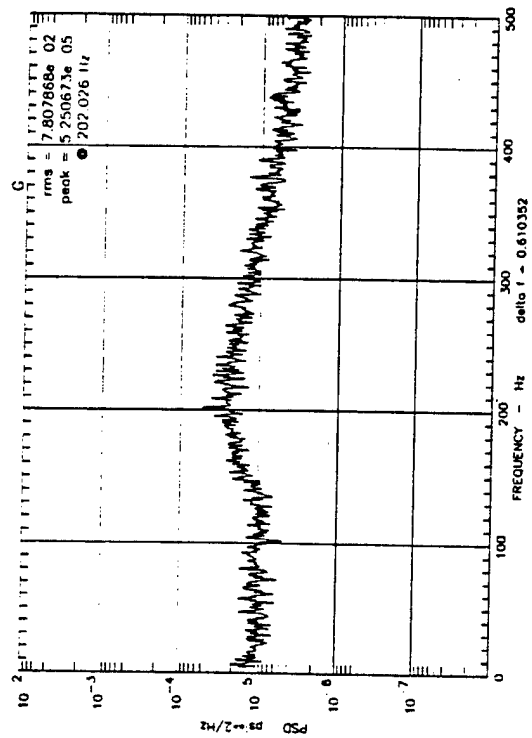
F 15 TPN 3341; alpha-24 beta=0 bp-45



F 15 TPN 3341; alpha-24 beta=0 bp-45

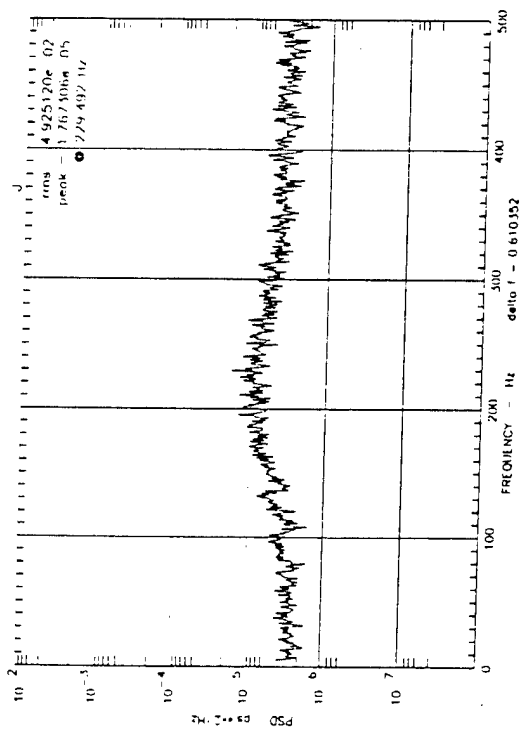


F 15 TPN 3341; alpha-24 beta=0 bp-45

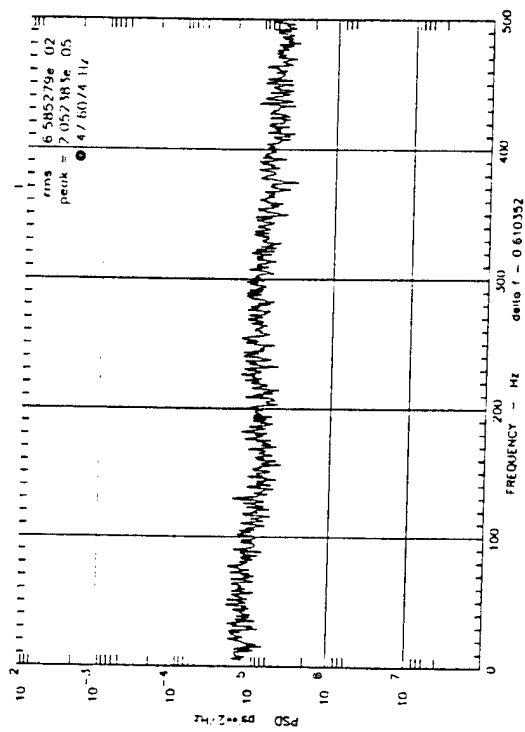




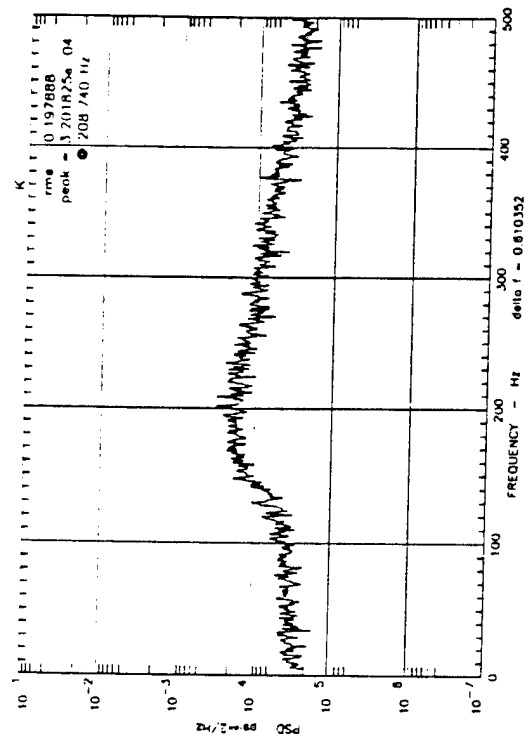
F 15 TPN .3341: alpha=24 beta=0 bp=45



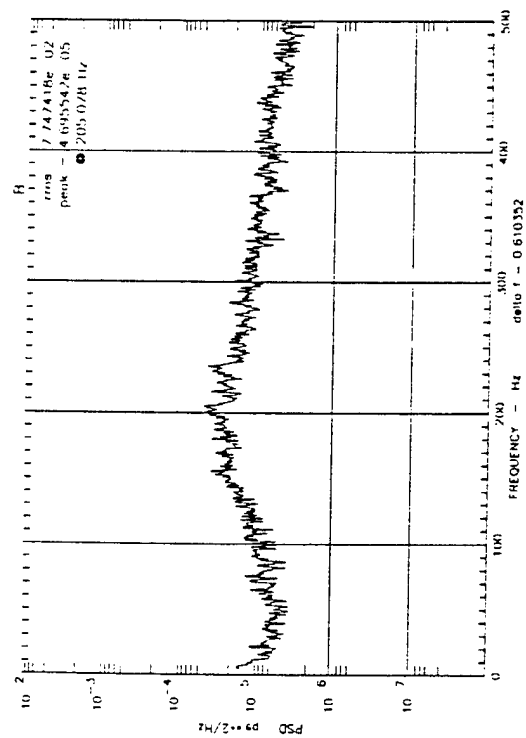
F 15 TPN .3341: alpha=24 beta=0 bp=45



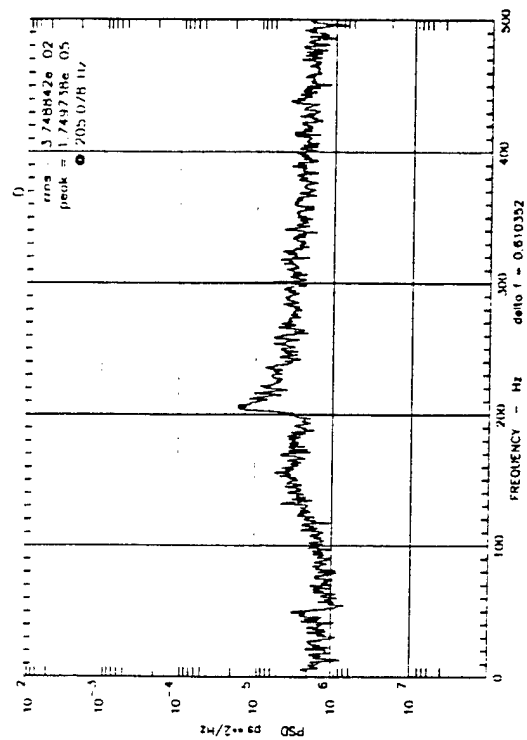
F 15 TPN .3341: alpha=24 beta=0 bp=45



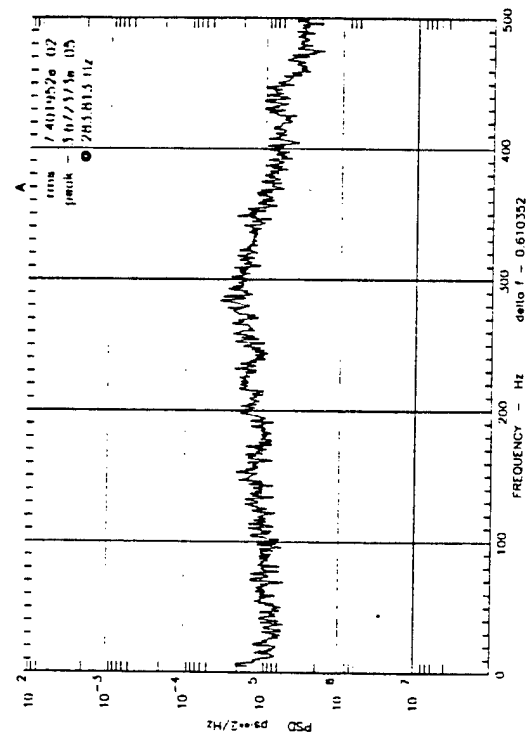
F 15 TPN 3342: alpha=28 beta=0 bp=45



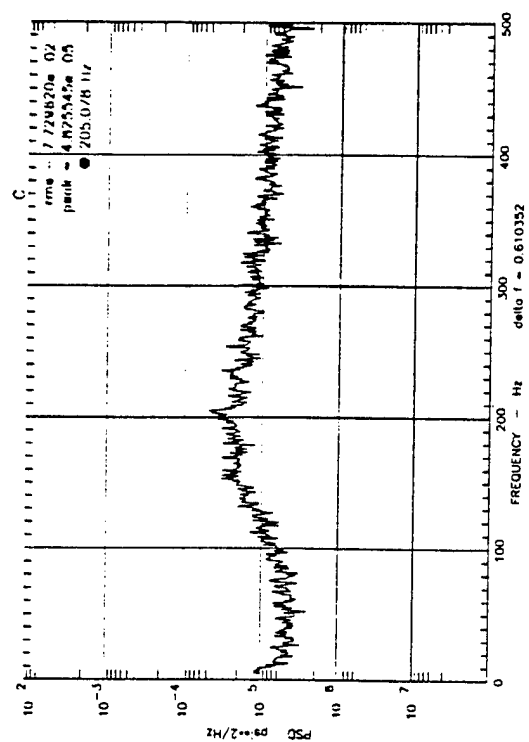
F 15 TPN 3342: alpha=28 beta=0 bp=45



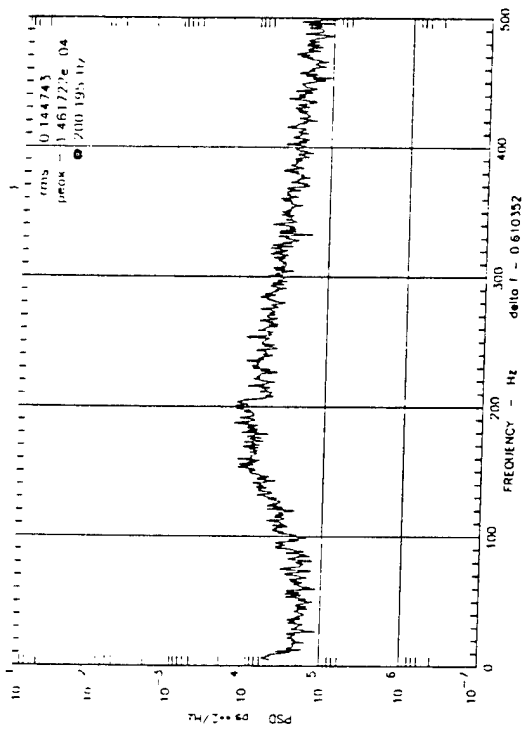
F 15 TPN 3342: alpha=28 beta=0 bp=45



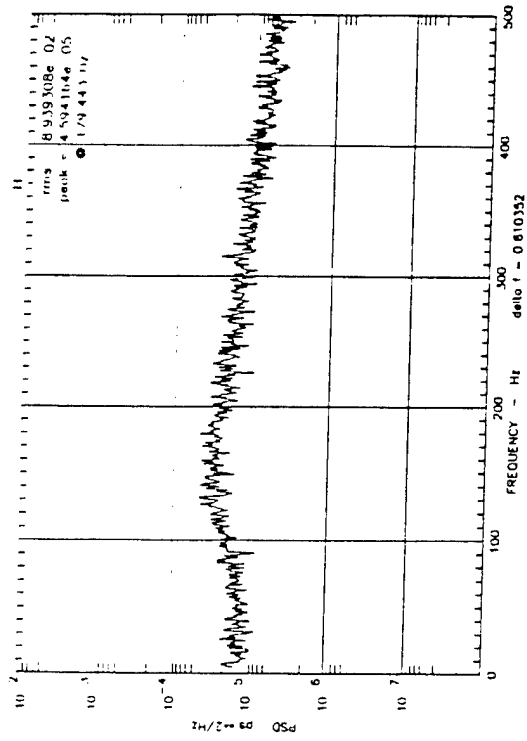
F 15 TPN 3342: alpha=28 beta=0 bp=45



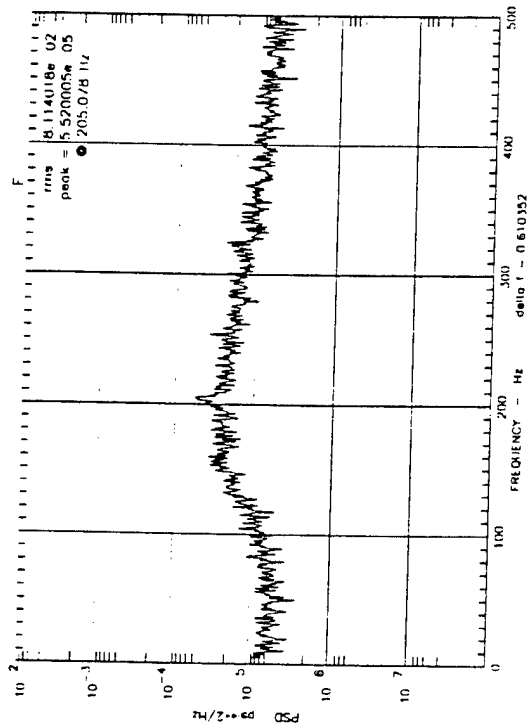
F 15 TPN 3342; alpha-28 beta-0 bp-45



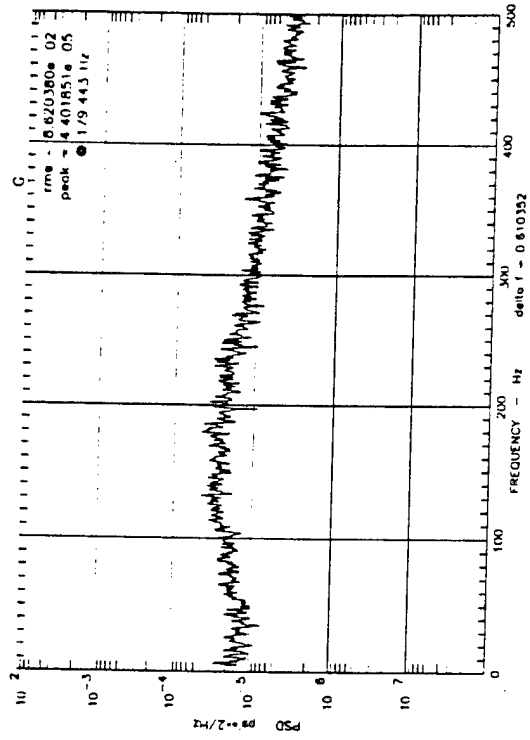
F 15 TPN 3342; alpha-28 beta-0 bp-45



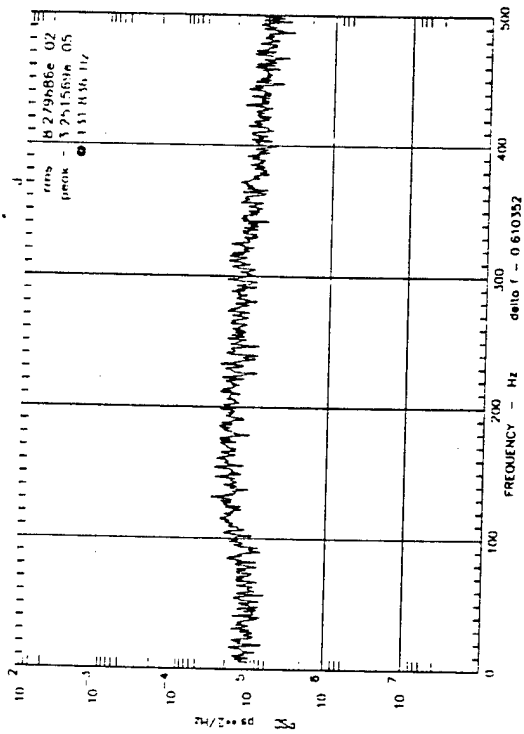
F 15 TPN 3342; alpha-28 beta-0 bp-45



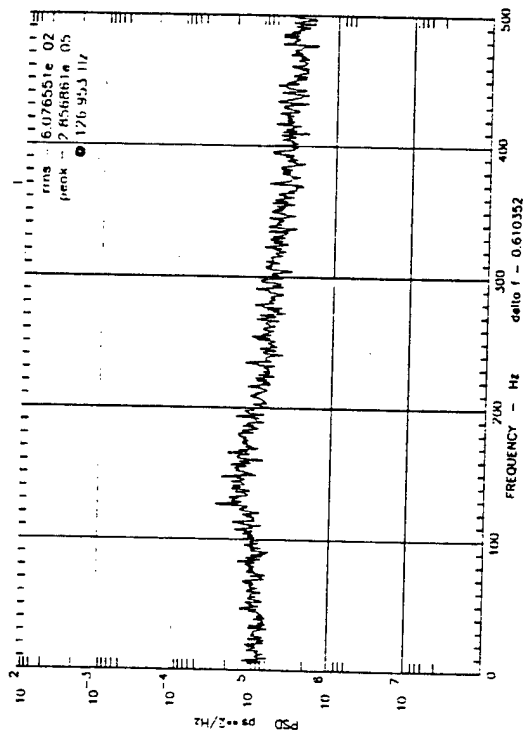
F 15 TPN 3342; alpha-28 beta-0 bp-45



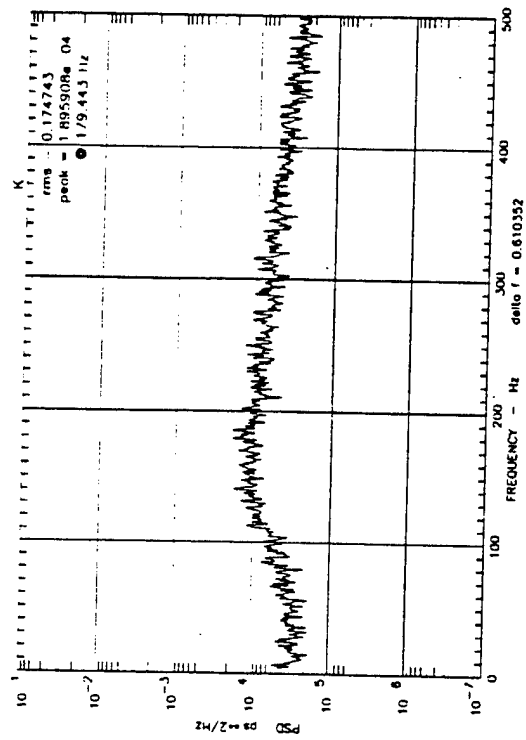
F 15 TPN 3342: alpha=28 beta=0 bp=45



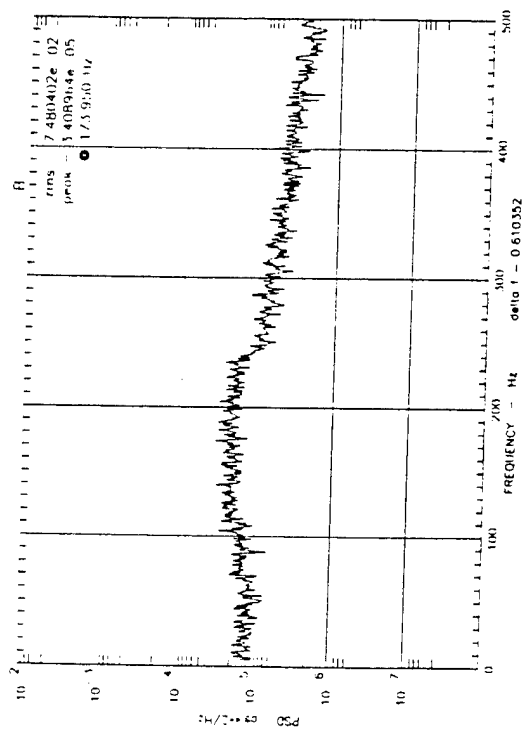
F 15 TPN 3342: alpha=28 beta=0 bp=45



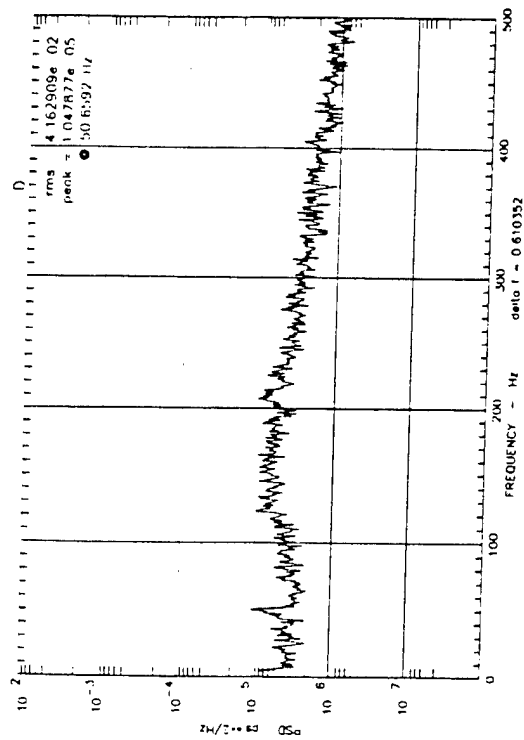
F 15 TPN 3342: alpha=28 beta=0 bp=45



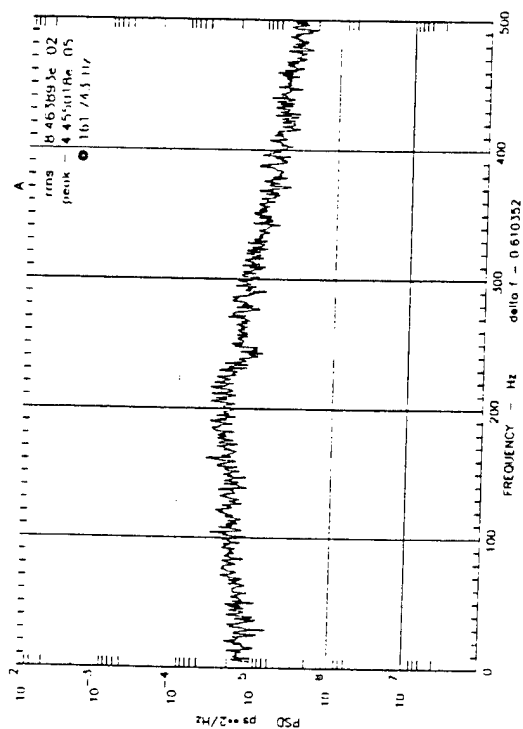
F 15 IPN 3343, alpha=32 beta=0 bp 45



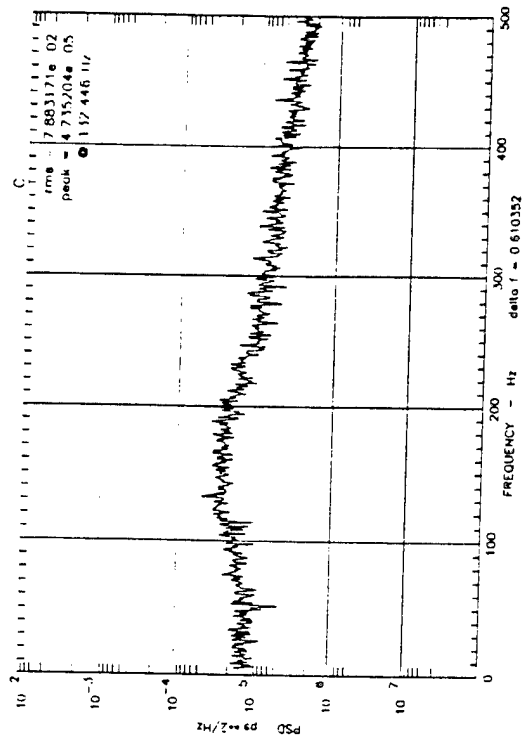
F 15 IPN 3343, alpha=32 beta=0 bp=45



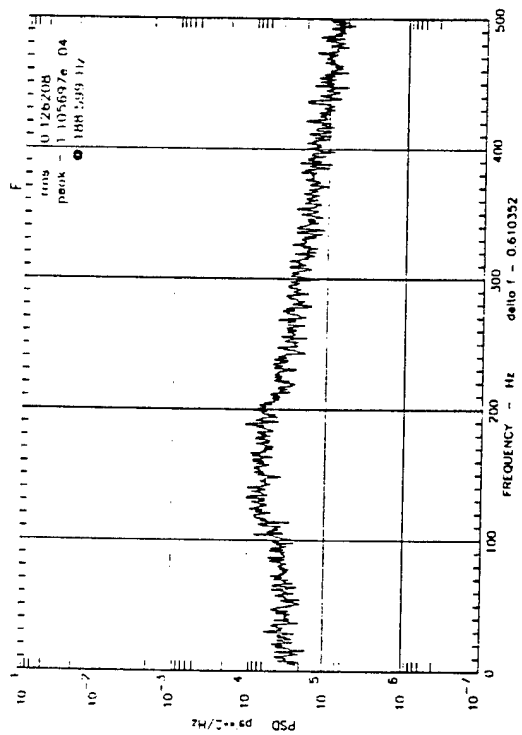
F 15 IPN 3343, alpha=32 beta=0 bp=45



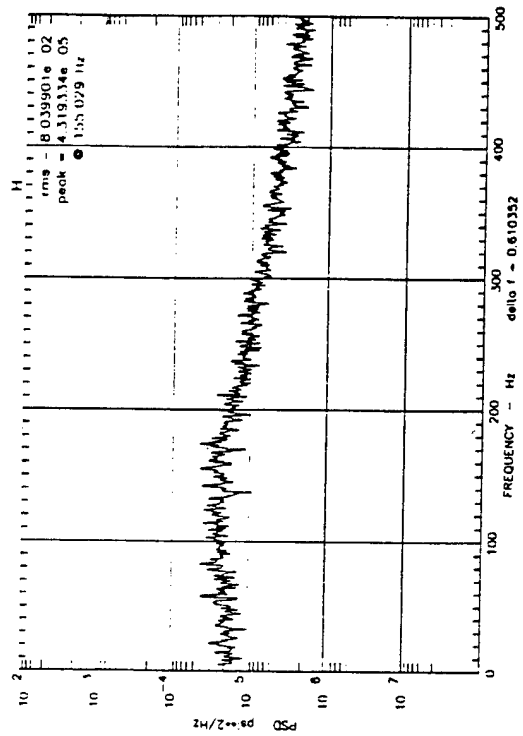
F 15 IPN 3343, alpha=32 beta=0 bp=45



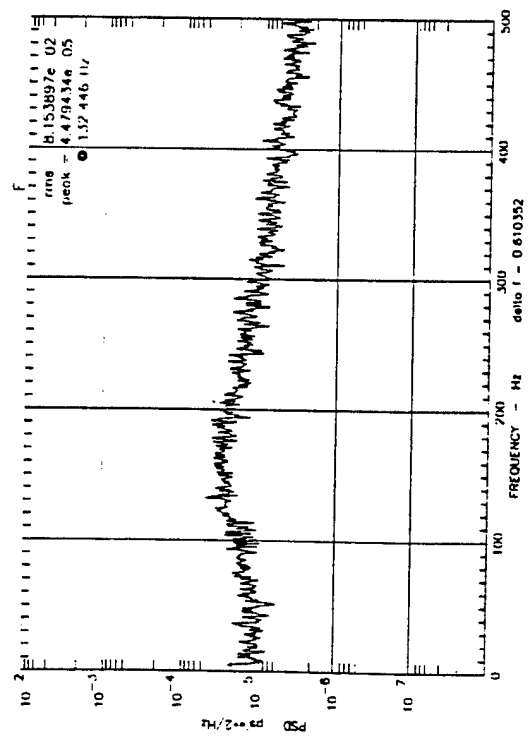
F 15 TPN 3343: alpha=32 beta=0 bp=45



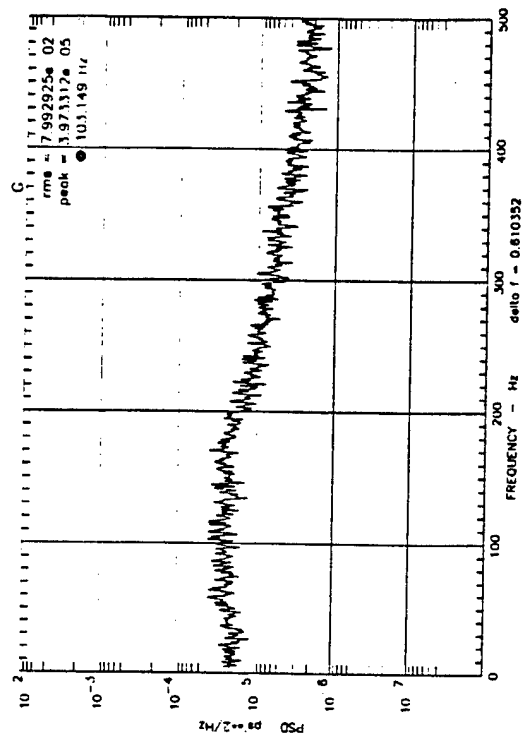
F 15 TPN 3343: alpha=32 beta=0 bp=45



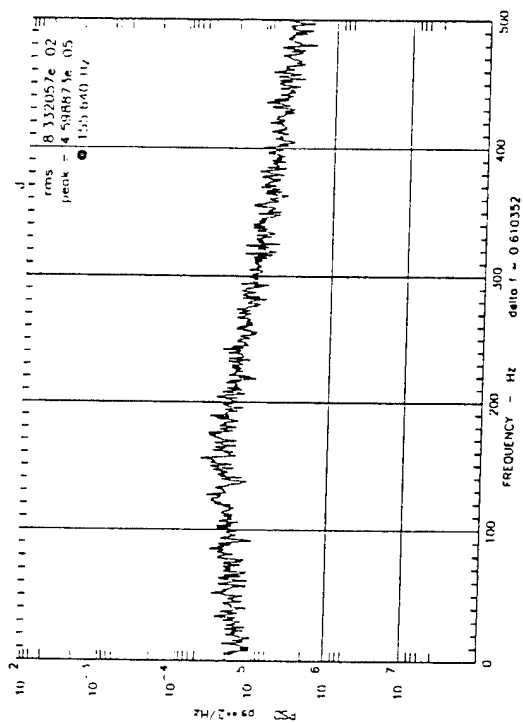
F 15 TPN 3343: alpha=32 beta=0 bp=45



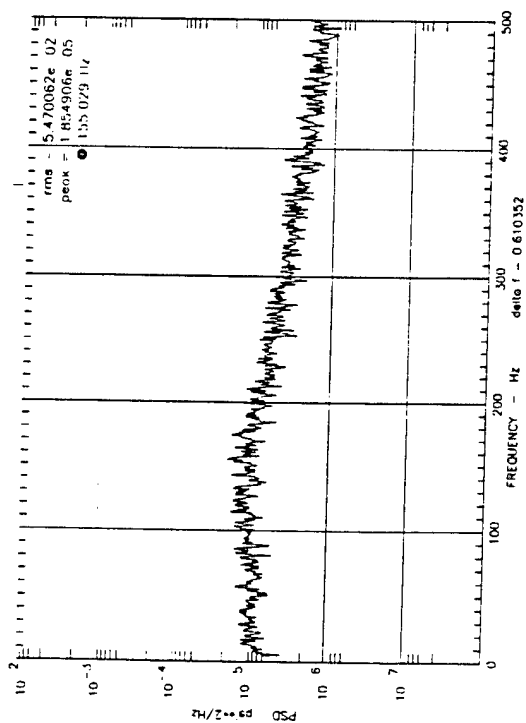
F 15 TPN 3343: alpha=32 beta=0 bp=45



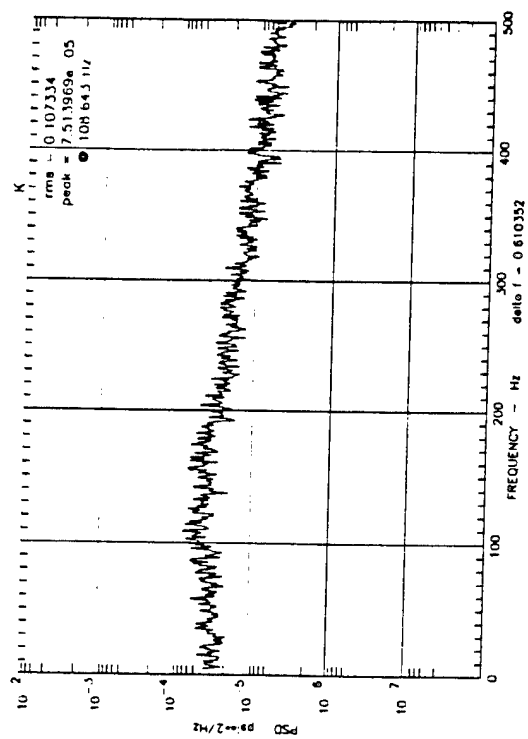
F 15 TPN 3343: alpha=32 beta=0 bp=45



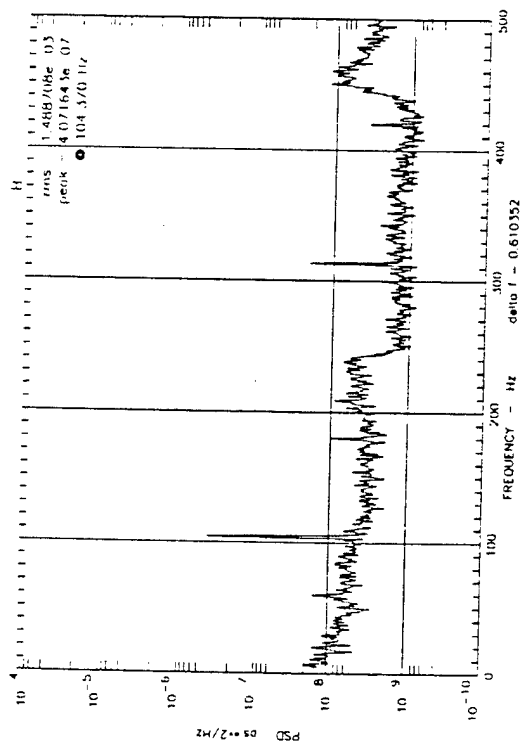
F 15 TPN 3343: alpha=32 beta=0 bp=45



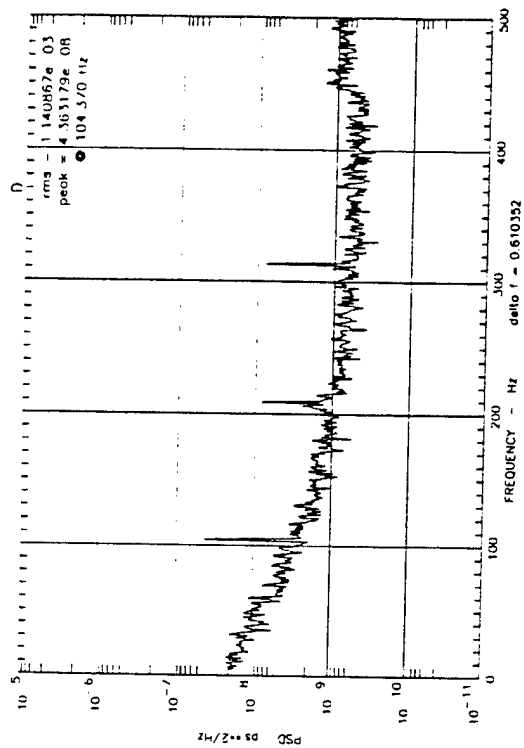
F 15 TPN 3343: alpha=32 beta=0 bp=45



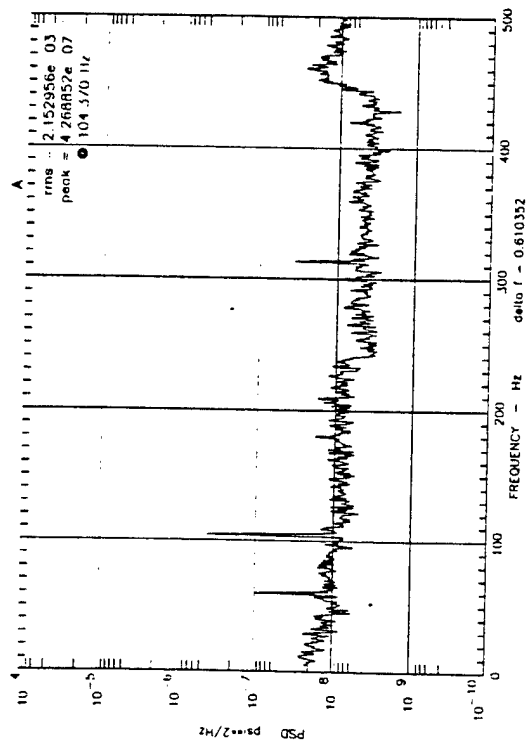
F 15 TPN 3369: alpha=8 beta= 4 bp=45



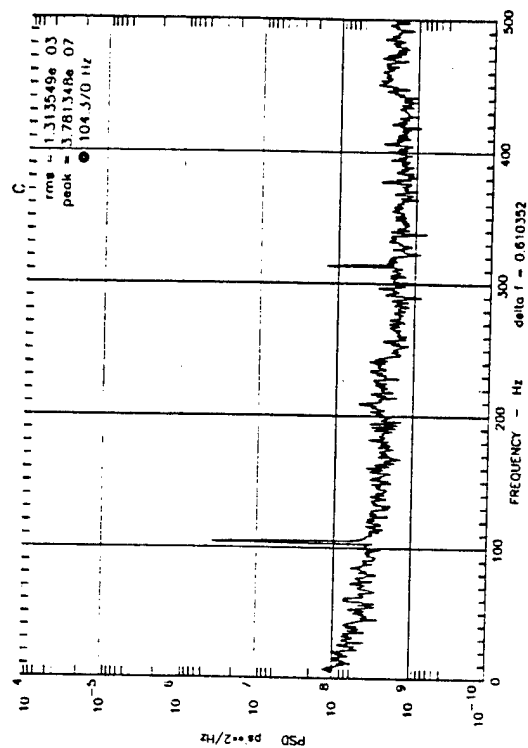
F 15 TPN 3369: alpha=8 beta= 4 bp=45



F 15 TPN 3369: alpha=8 beta= 4 bp=45

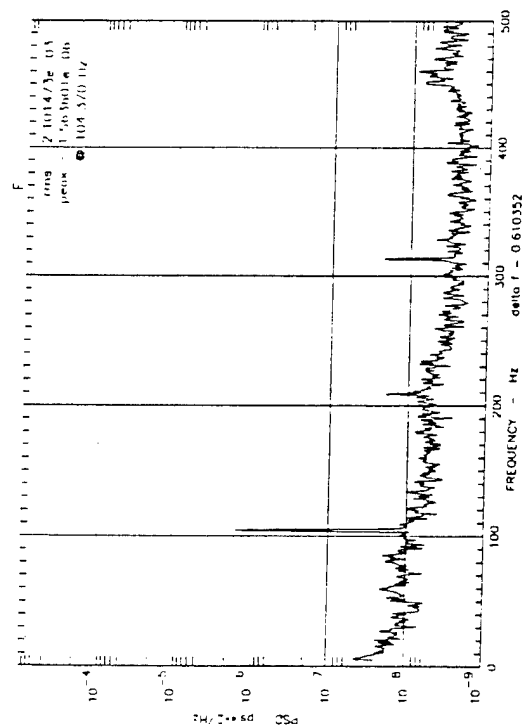


F 15 TPN 3369: alpha=8 beta= 4 bp=45

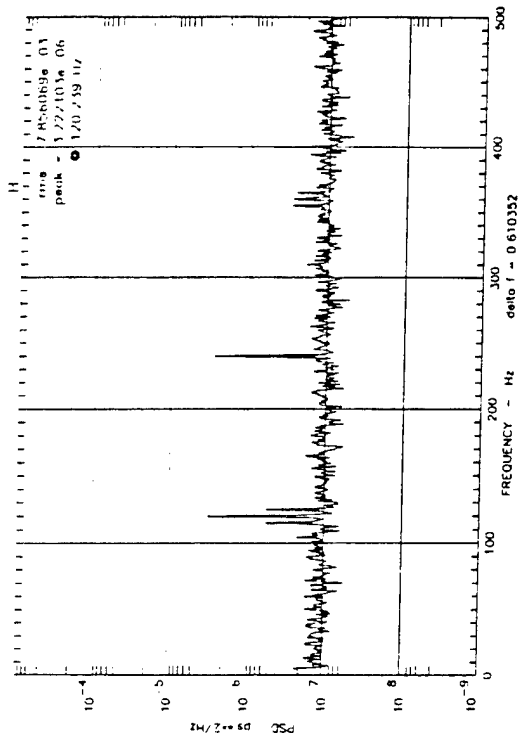




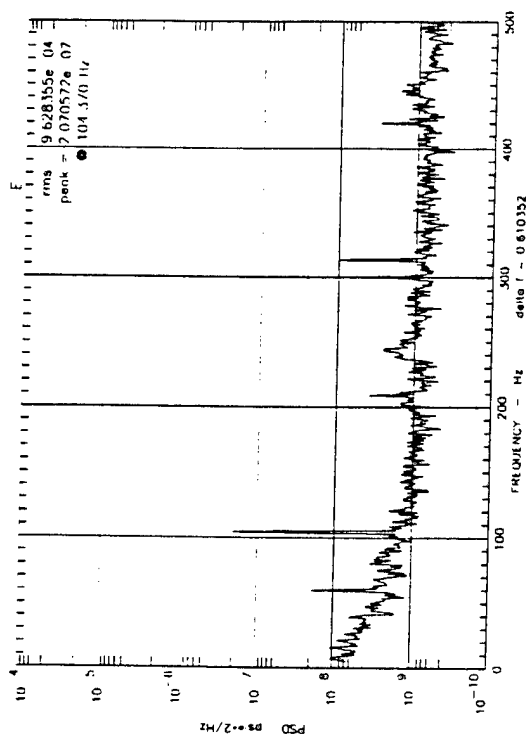
F 15 IPN 3369; alpha=8 beta= 4 bp=45



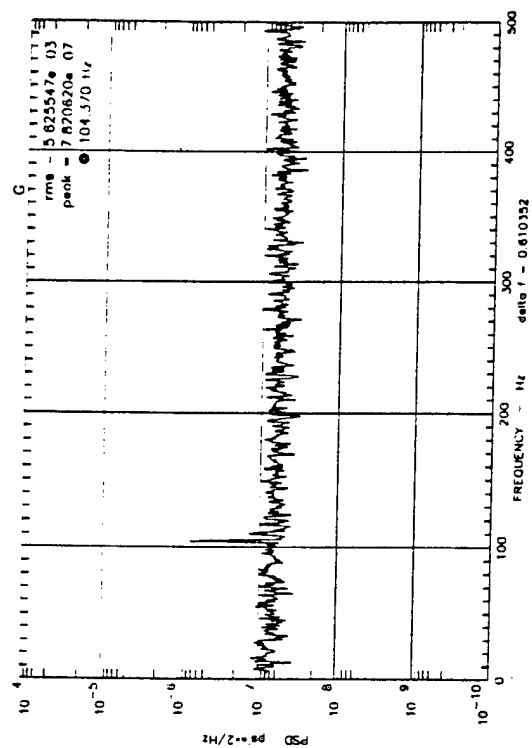
F 15 IPN 3369; alpha=8 beta= 4 bp=45

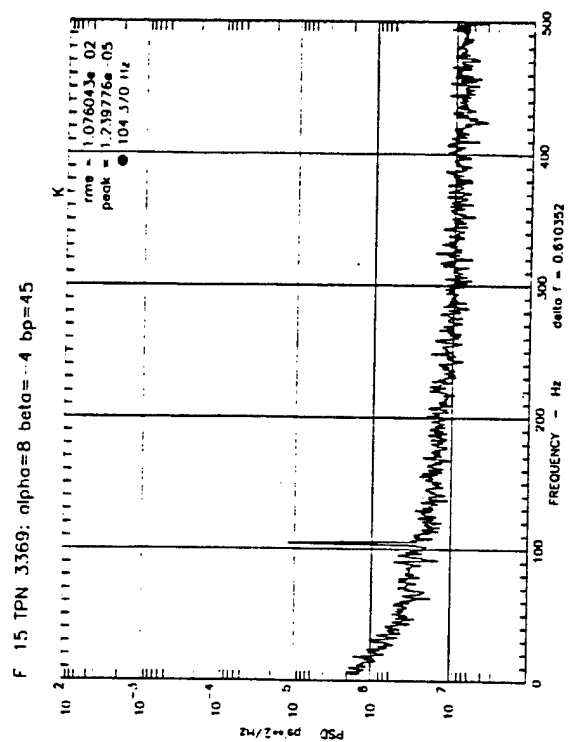
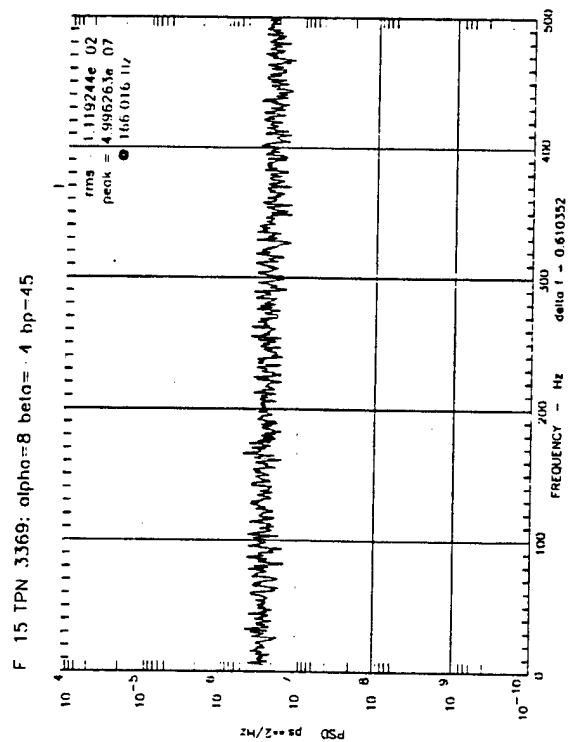
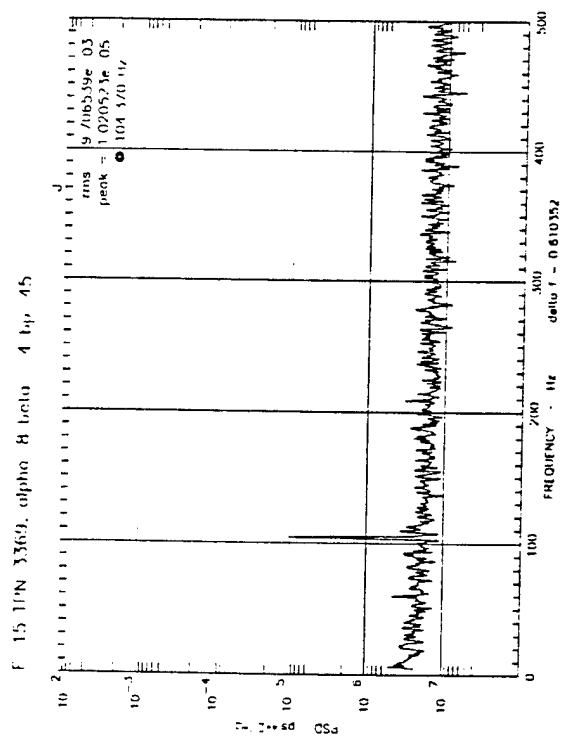


F 15 IPN 3369; alpha=8 beta= 4 bp=45

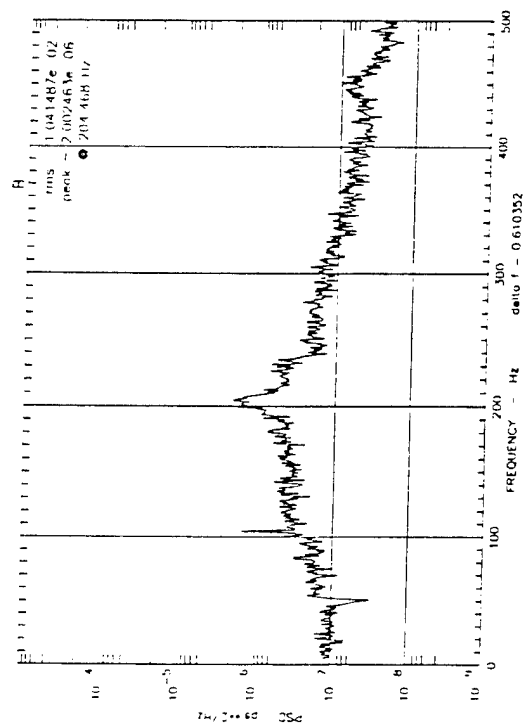


F 15 IPN 3369; alpha=8 beta= 4 bp=45

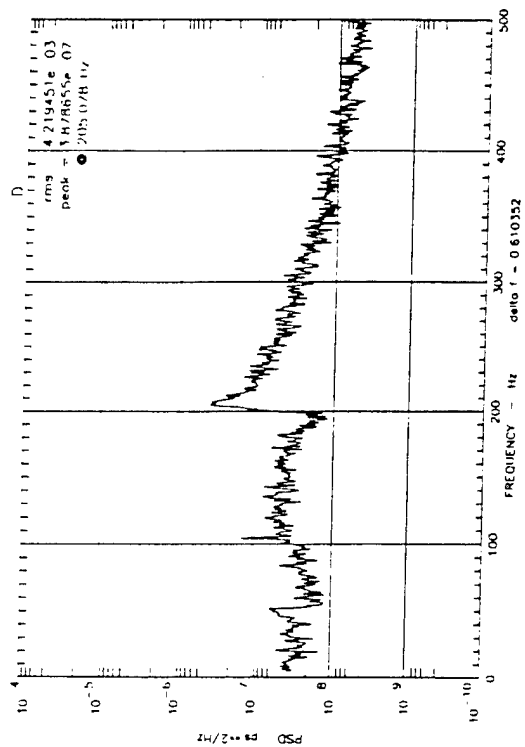




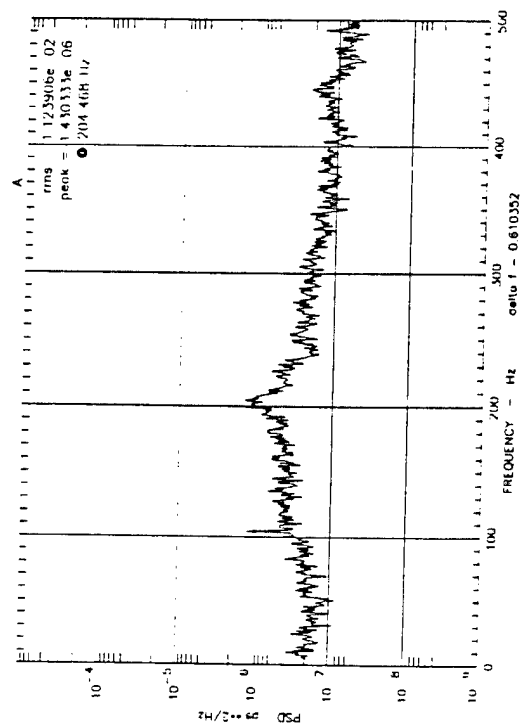
F 15 IPN 3373; alpha=16 beta= 4 bp=45



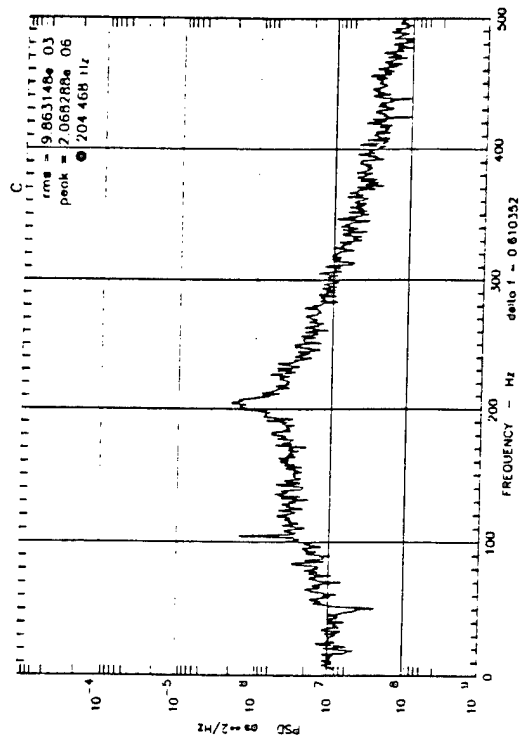
F 15 IPN 3373; alpha=16 beta= 4 bp=45



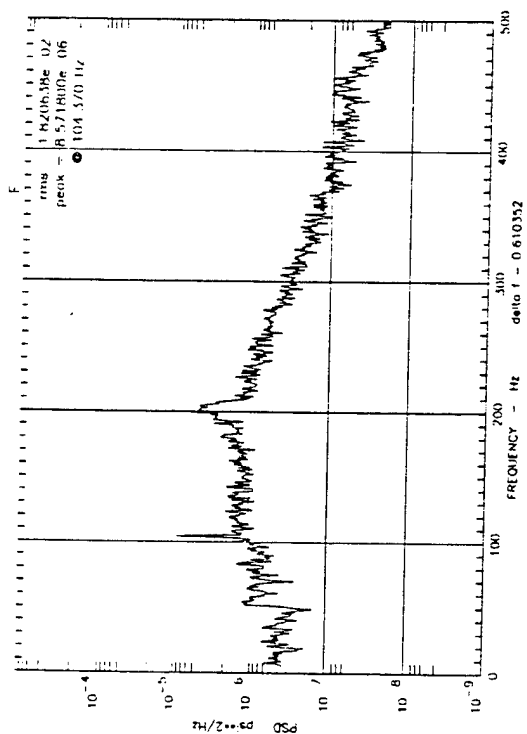
F 15 IPN 3373; alpha=16 beta= 4 bp=45



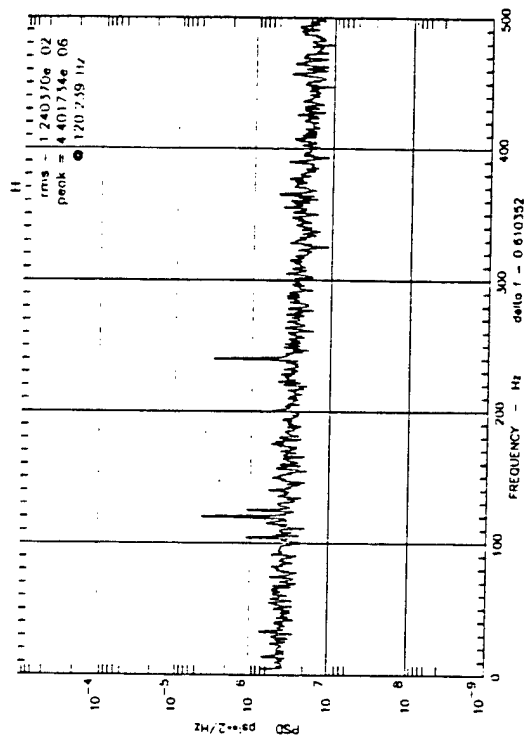
F 15 IPN 3373; alpha=16 beta= 4 bp=45



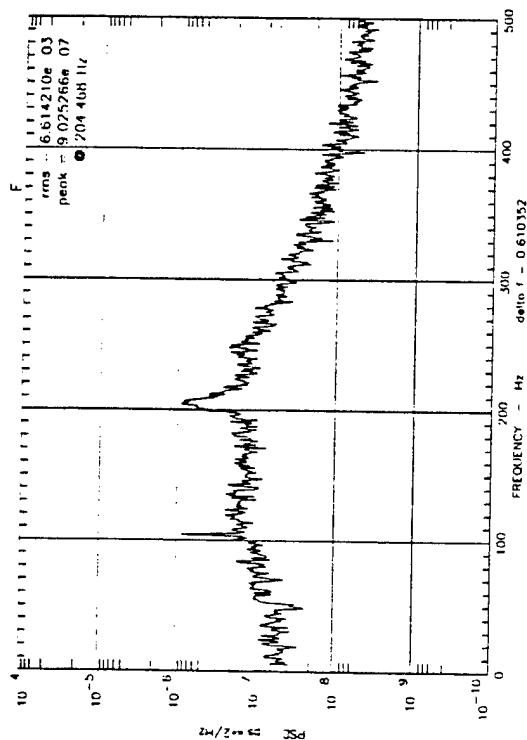
F 15 TPN 3373: alpha=16 beta=-4 bp=45



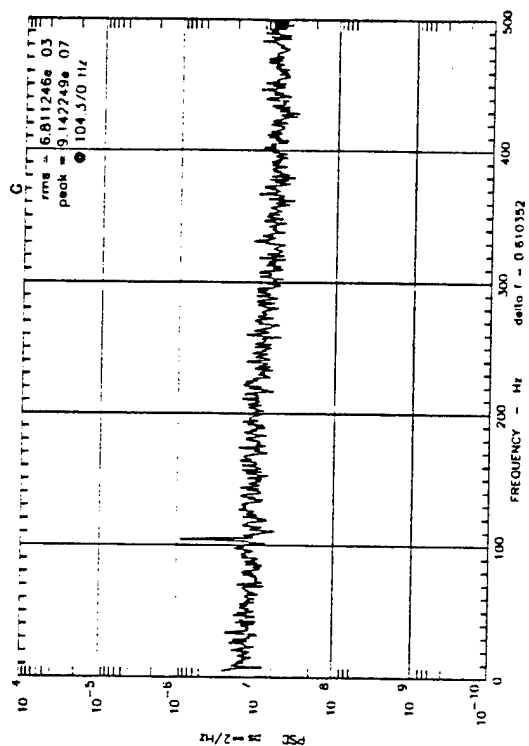
F 15 TPN 3373: alpha=16 beta=-4 bp=45

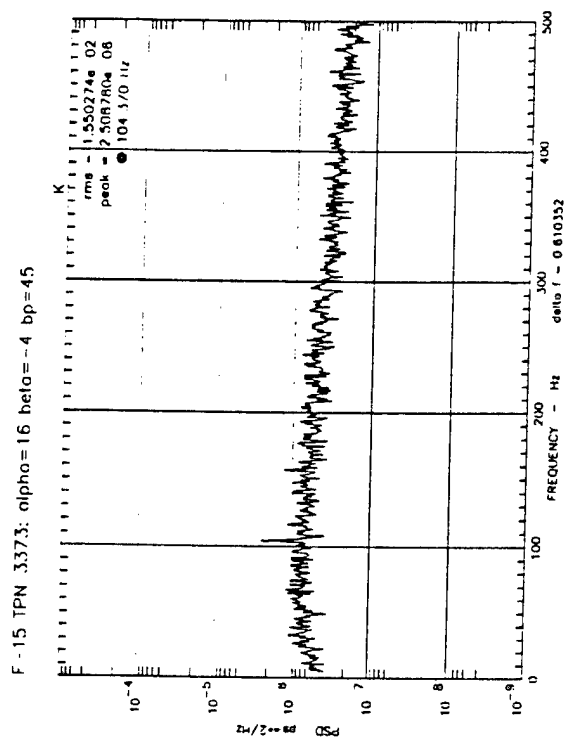
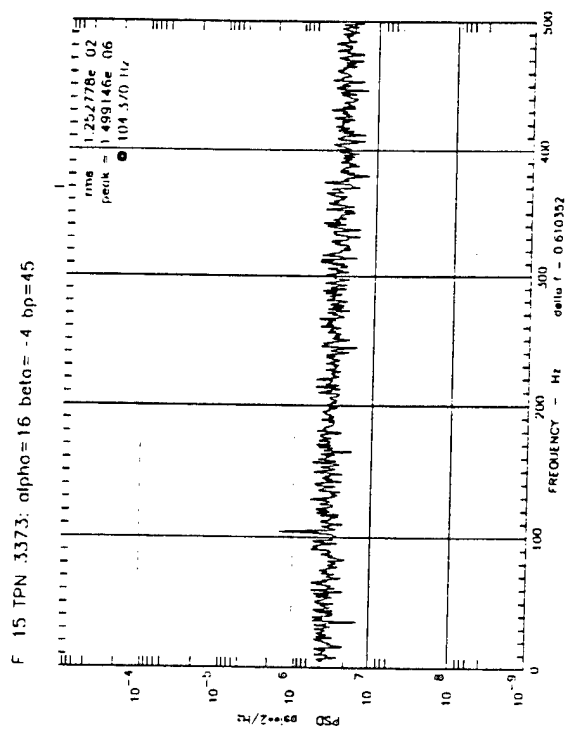
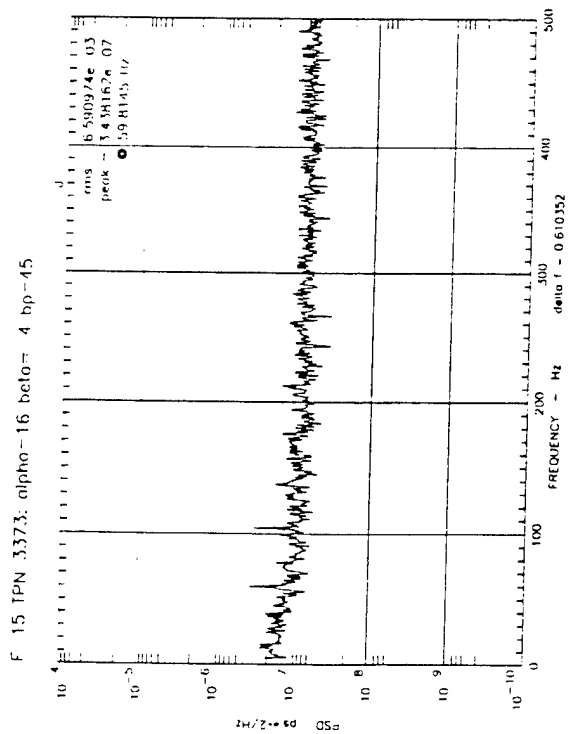


F 15 TPN 3373: alpha=16 beta=-4 bp=45

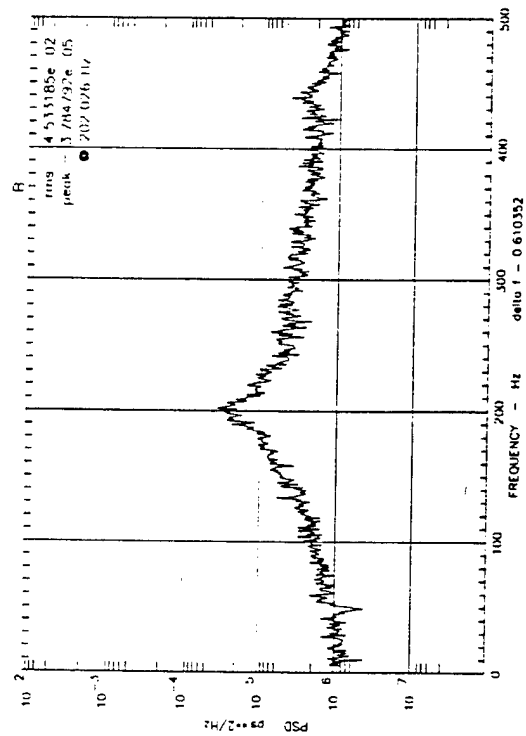


F 15 TPN 3373: alpha=16 beta=-4 bp=45

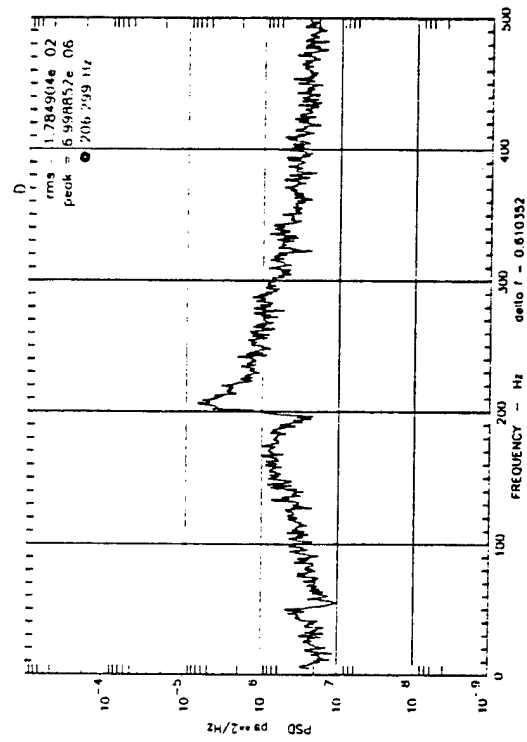




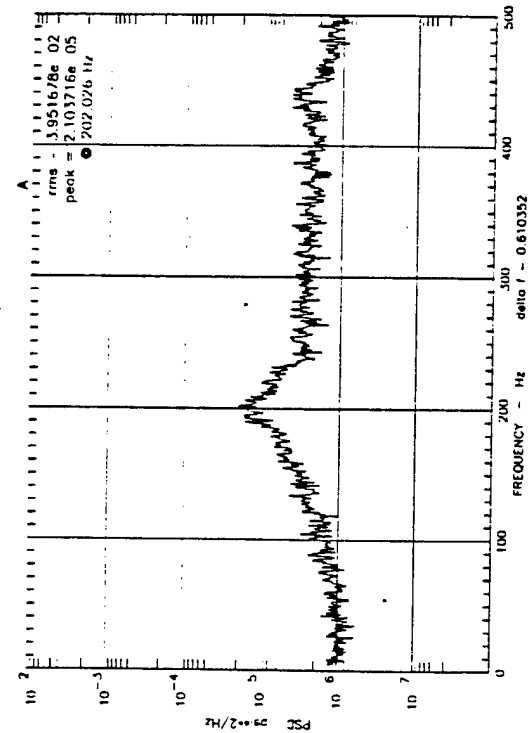
F 15 TPN 3375: alpha=20 beta= 4 bp=45



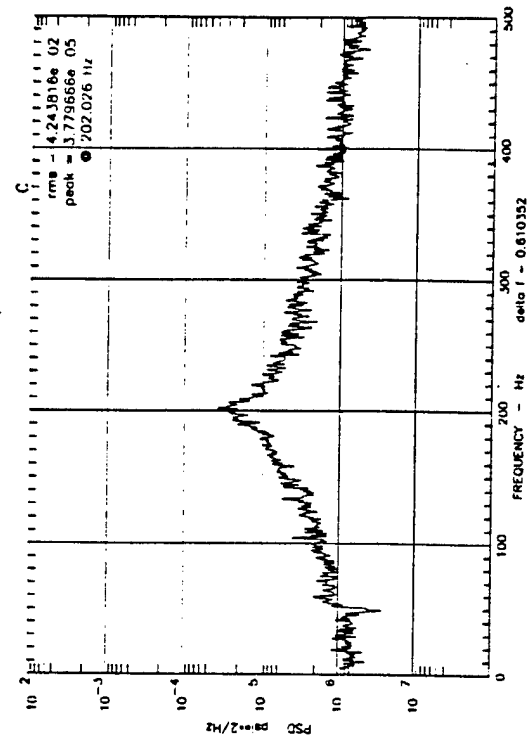
F 15 TPN 3375: alpha=20 beta= 4 bp=45



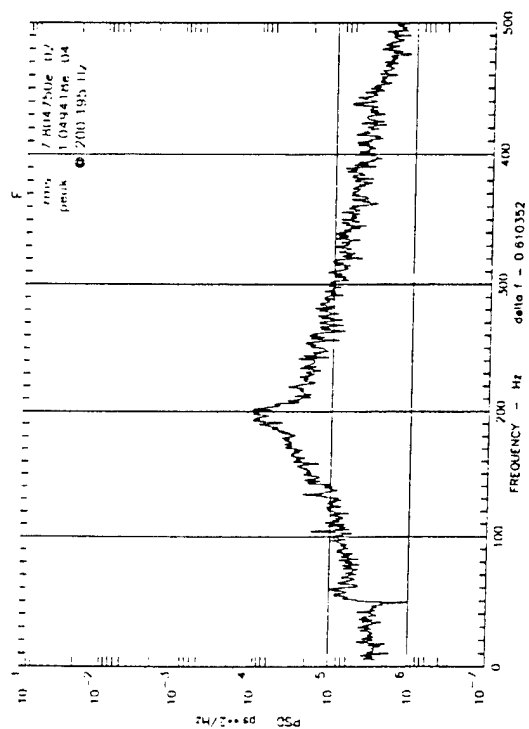
F 15 TPN 3375: alpha=20 beta= 4 bp=45



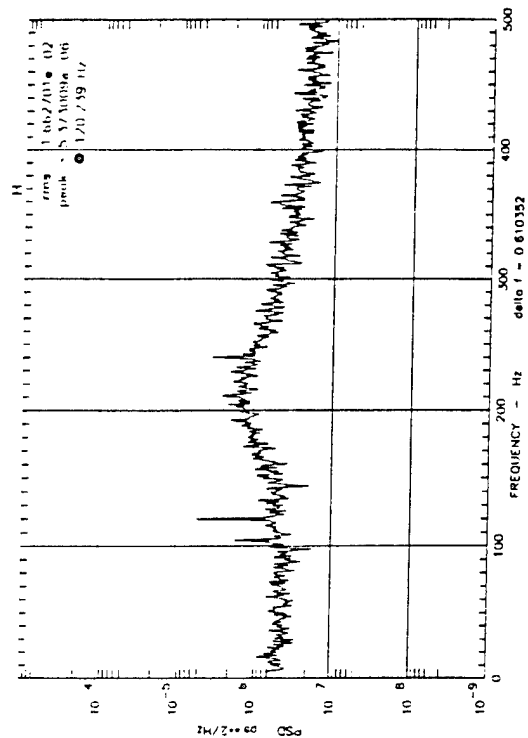
F 15 TPN 3375: alpha=20 beta=-4 bp=45



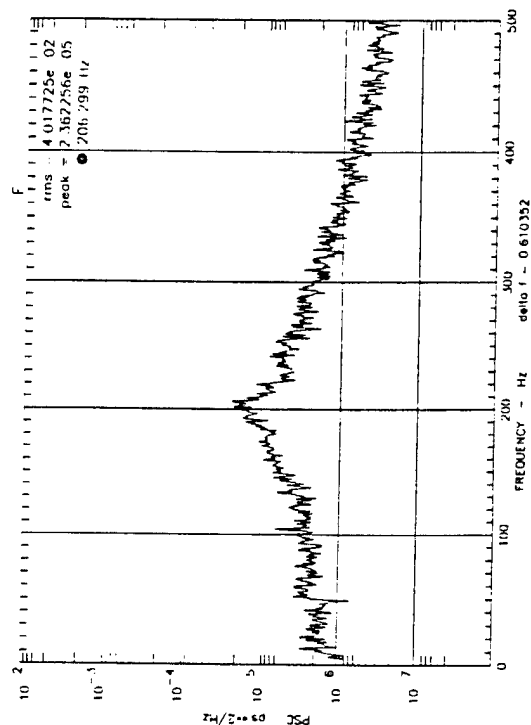
F 15 TPN 3375; alpha=20 beta= 4 bp=45



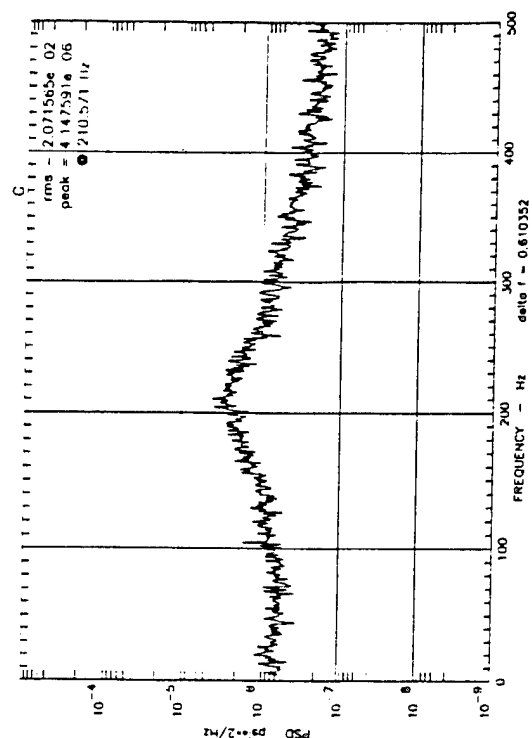
F 15 TPN 3375; alpha=20 beta= 4 bp=45



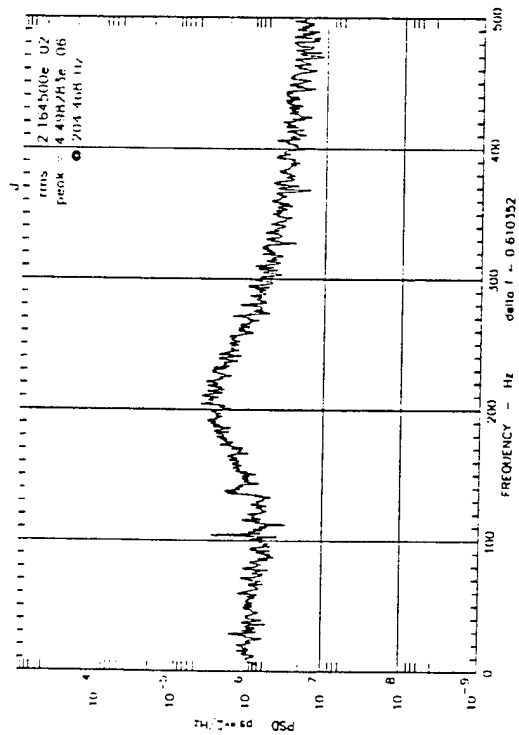
F 15 TPN 3375; alpha=20 beta= 4 bp=45



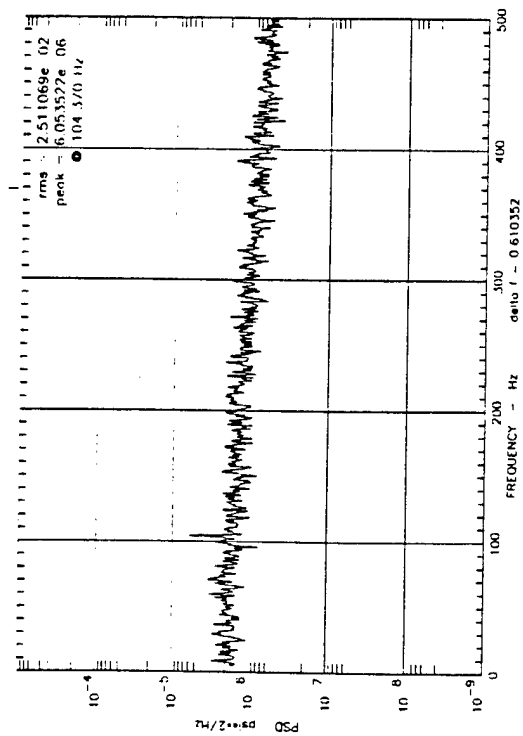
F 15 TPN 3375; alpha=20 beta= 4 bp=45



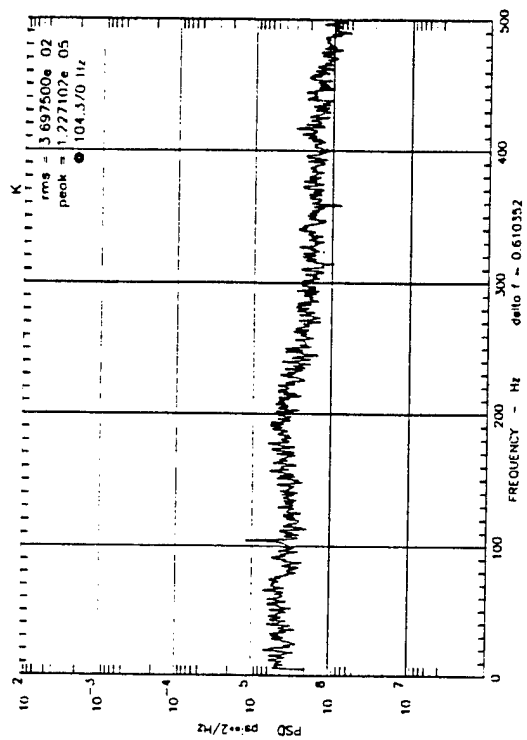
F 15 TPN 3375; alpha=20 beta=-4 bp=45



F 15 TPN 3375; alpha=20 beta=-4 bp=45

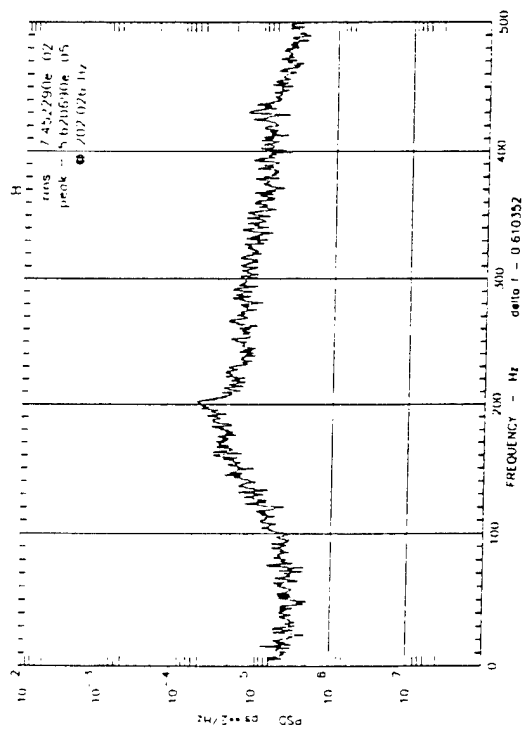


F 15 TPN 3375; alpha=20 beta=-4 bp=45

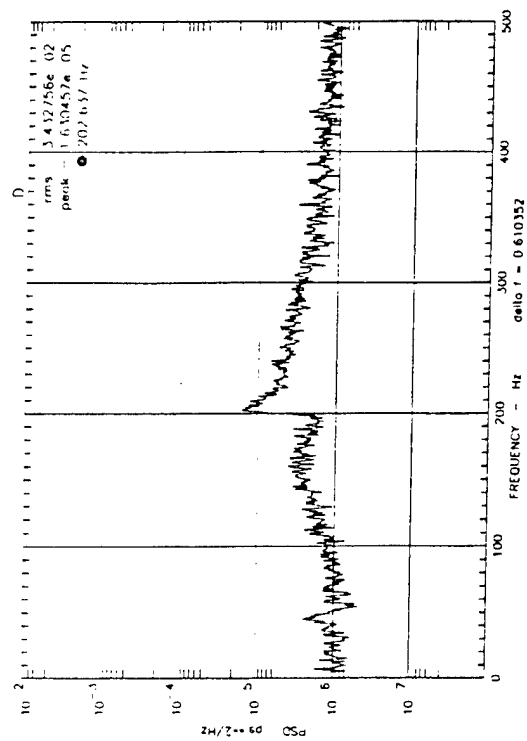




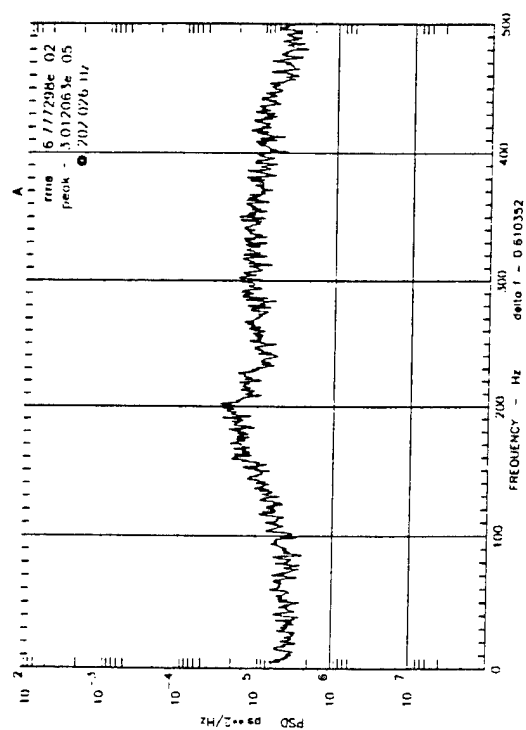
F 15 IPN 3377: alpha=24 beta=-4 bp=45



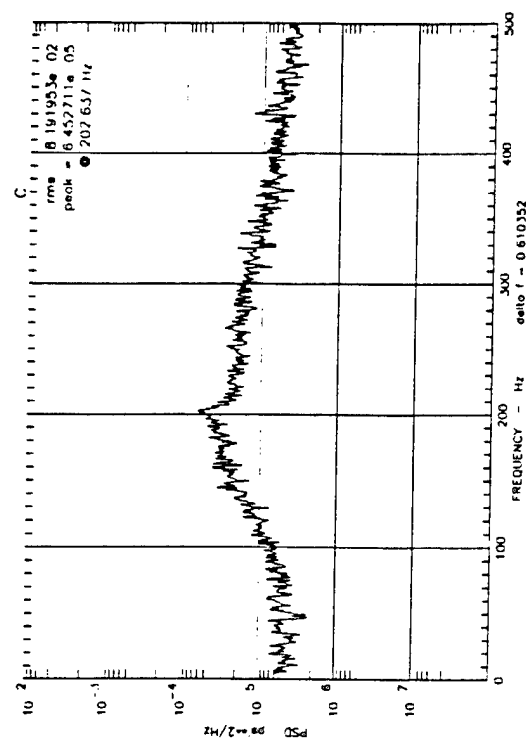
F 15 IPN 3377: alpha=24 beta=-4 bp=45



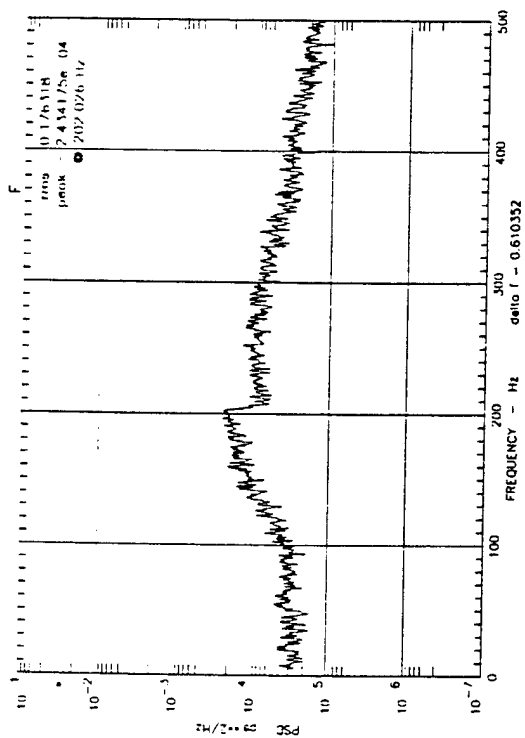
F 15 IPN 3377: alpha=24 beta=-4 bp=45



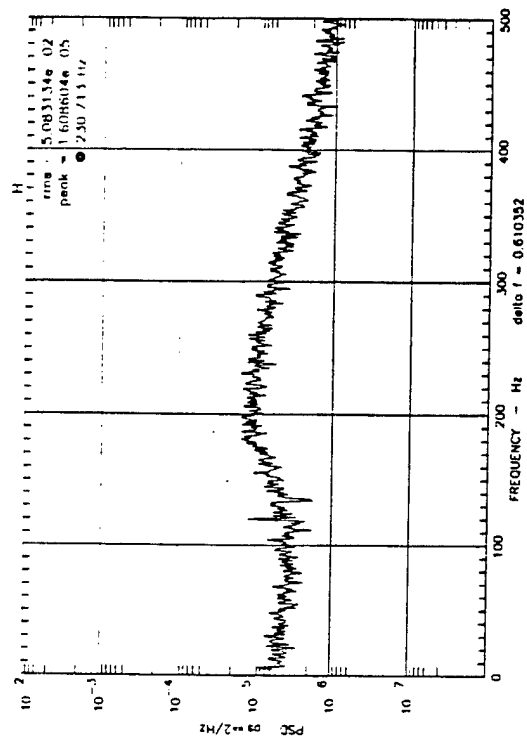
F 15 IPN 3377: alpha=24 beta=-4 bp=45



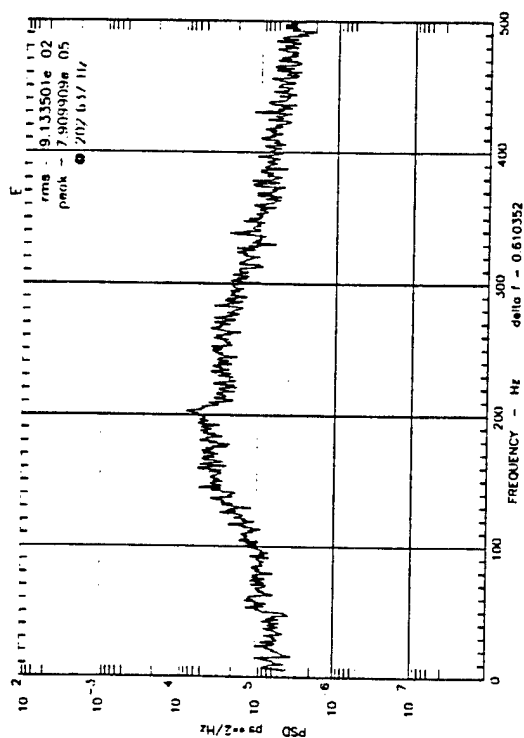
F 15 IPN 3377: alpha=24 beta= 4 bp=45



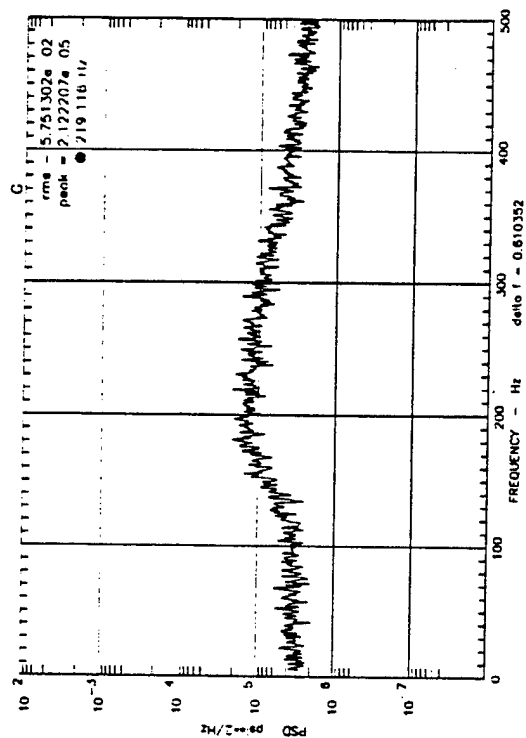
F 15 IPN 3377: alpha=24 beta= 4 bp=45



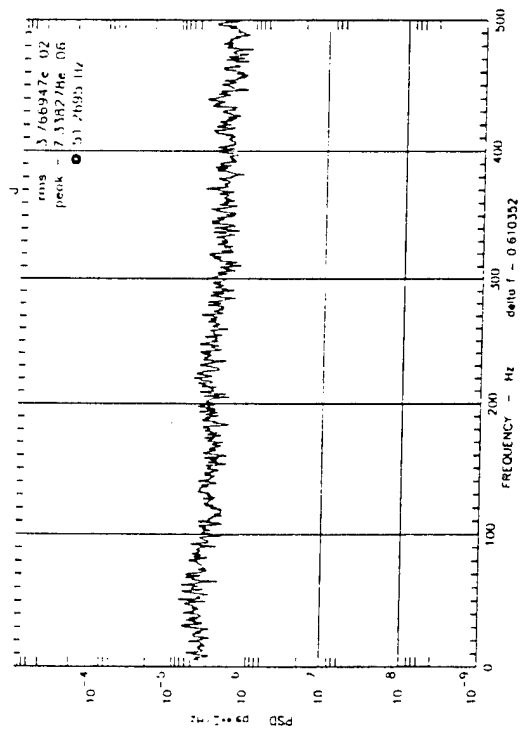
F 15 IPN 3377: alpha=24 beta= 4 bp=45



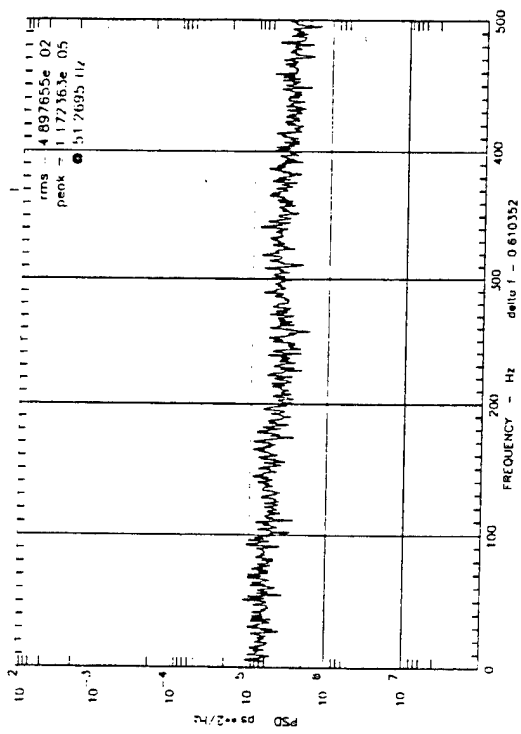
F 15 IPN 3377: alpha=24 beta= 4 bp=45



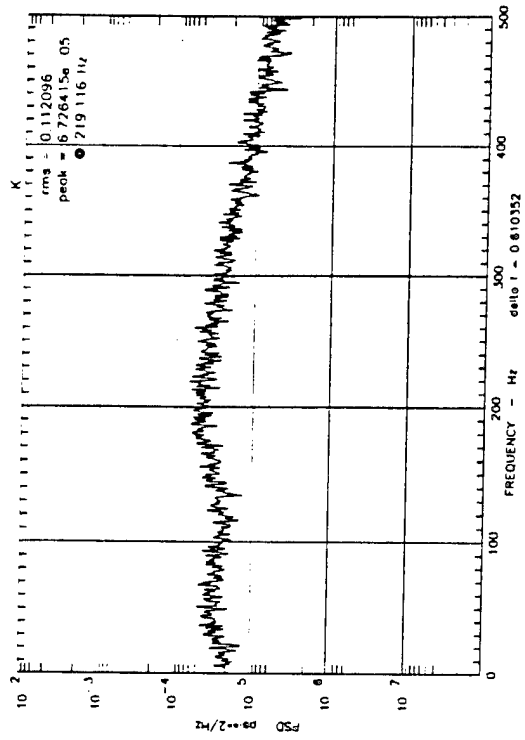
F 1.5 TPN 3377: alpha=24 beta= 4 bp=45



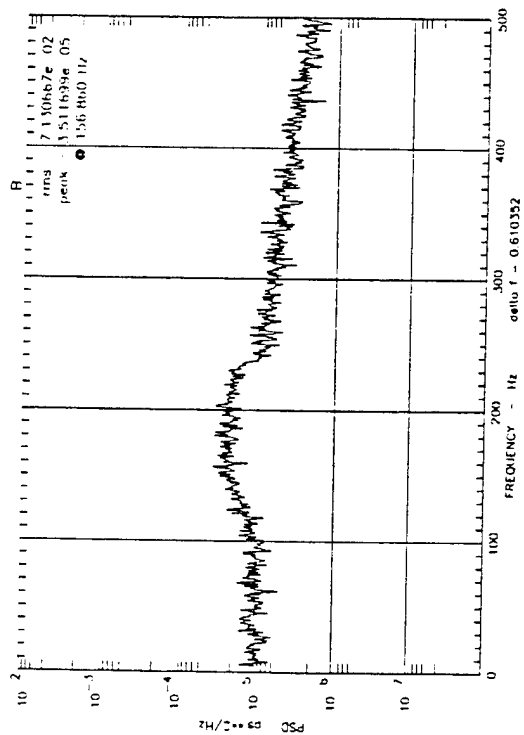
F 1.5 TPN 3377: alpha=24 beta= 4 bp=45



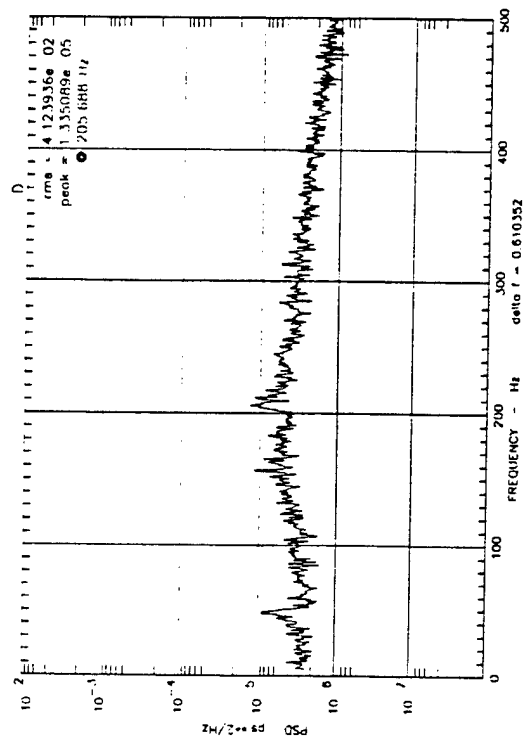
F 1.5 TPN 3377: alpha=24 beta= 4 bp=45



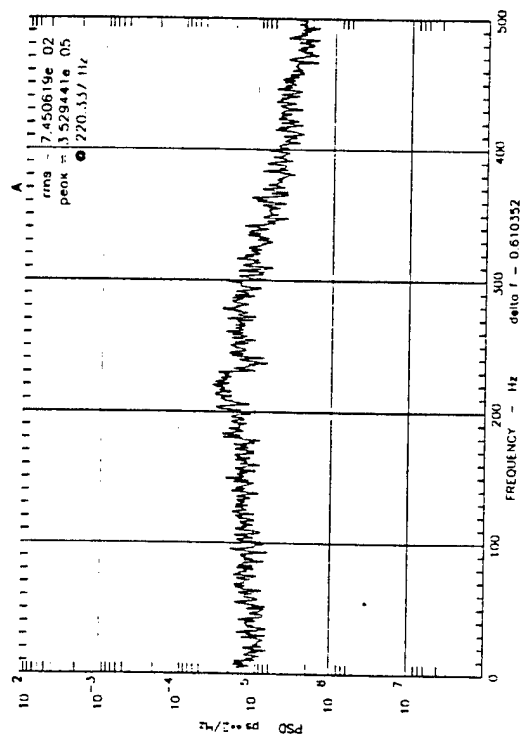
F 15 TPN 3378: alpha=28 beta= 4 bp=45



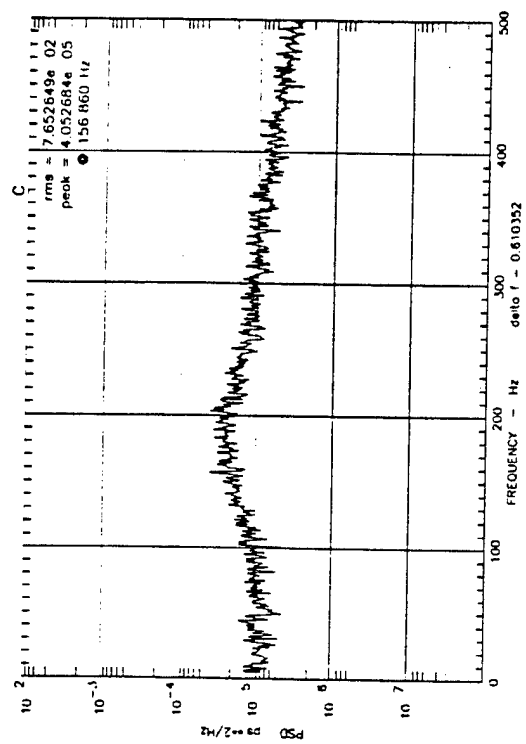
F 15 TPN 3378: alpha=28 beta= 4 bp=45



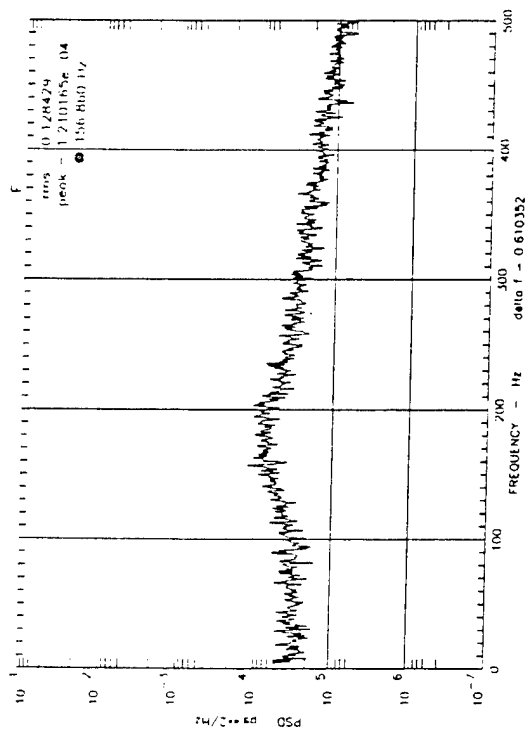
F 15 TPN 3378: alpha=28 beta= 4 bp=45



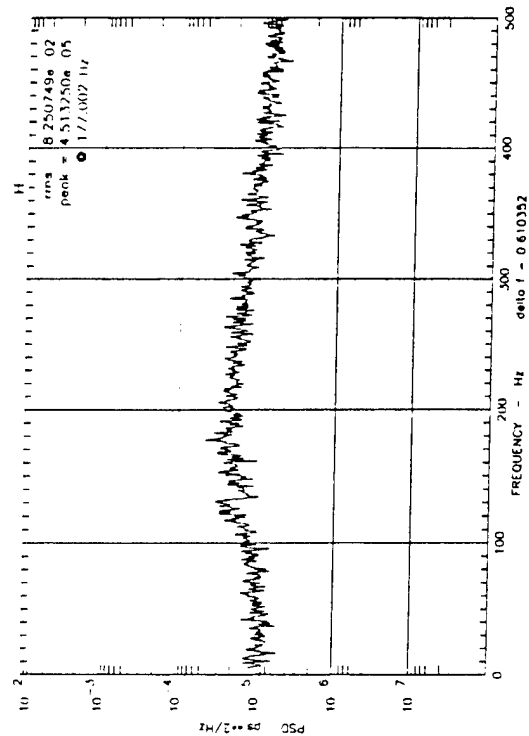
F 15 TPN 3378: alpha=28 beta= 4 bp=45



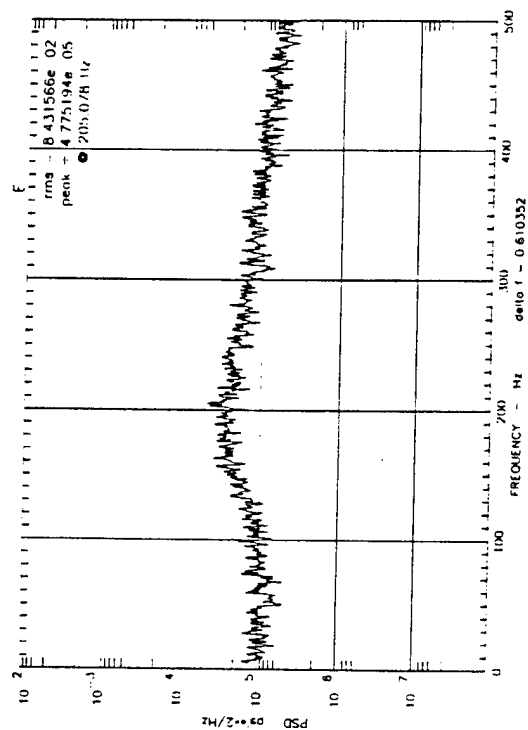
F 15 TPN 3378; alpha=28 beta=-4 bp=45



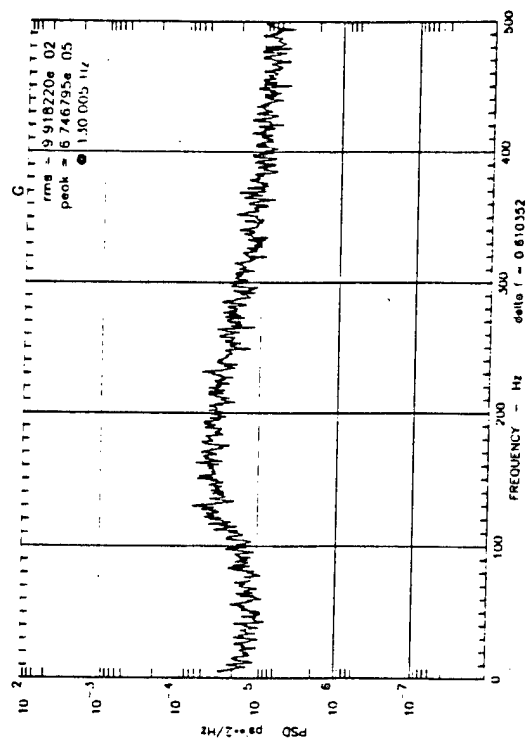
F 15 TPN 3378; alpha=28 beta=-4 bp=45

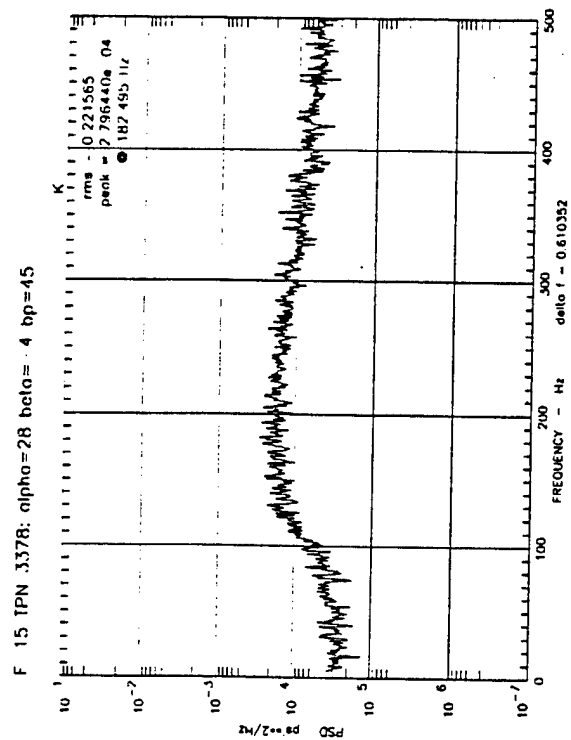
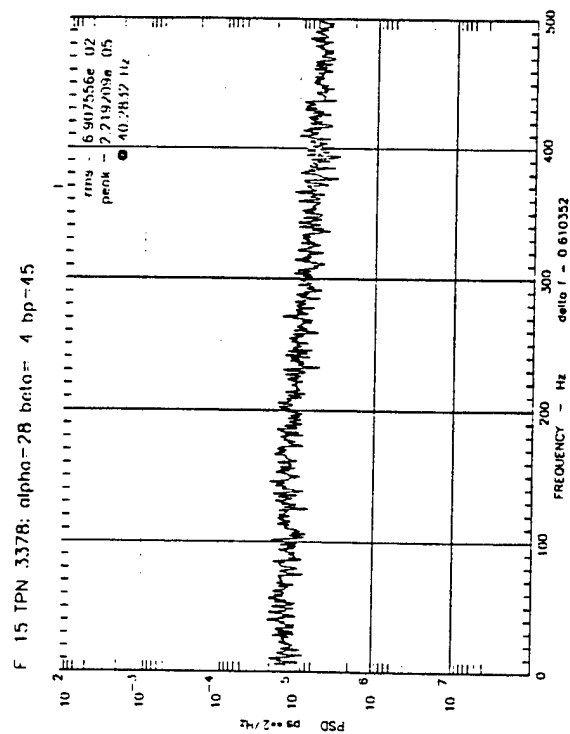
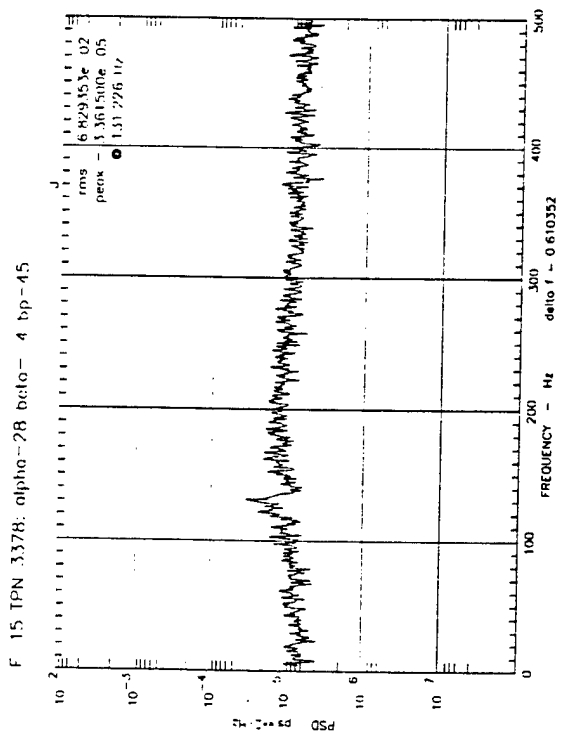


F 15 TPN 3378; alpha=28 beta=4 bp=45

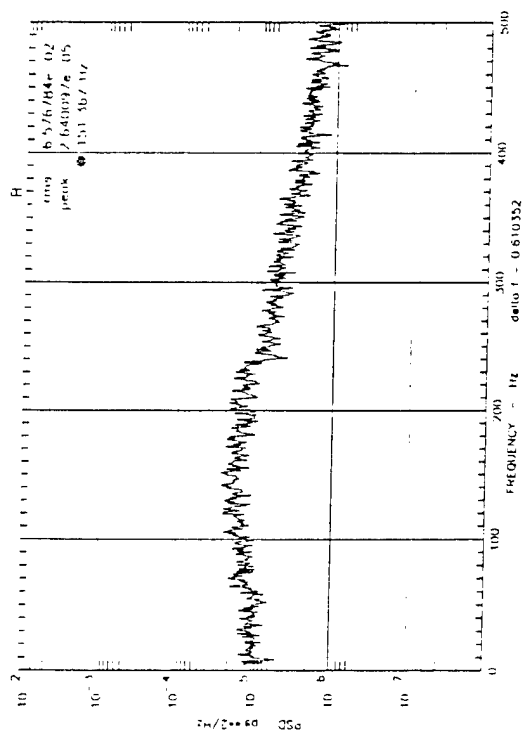


F 15 TPN 3378; alpha=28 beta=4 bp=45

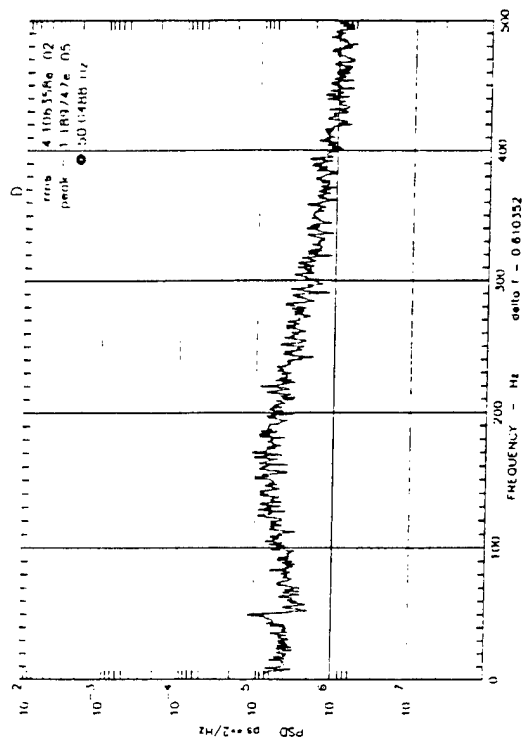




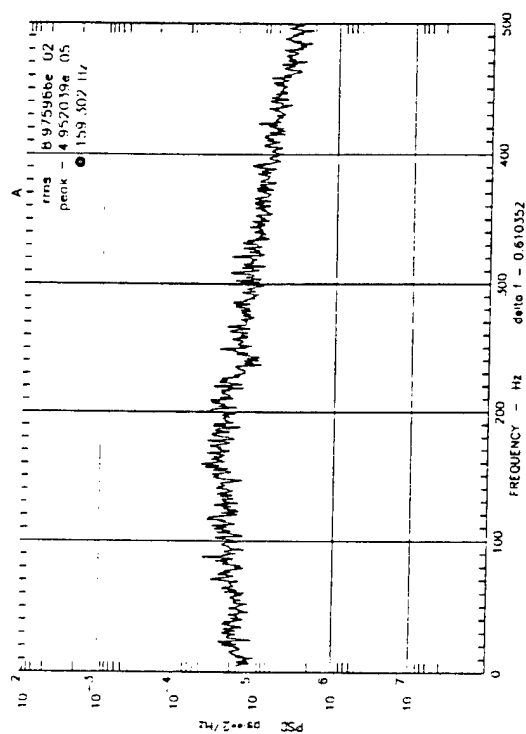
F 15 TPN 3379; alpha=32 beta= 4 bp=45



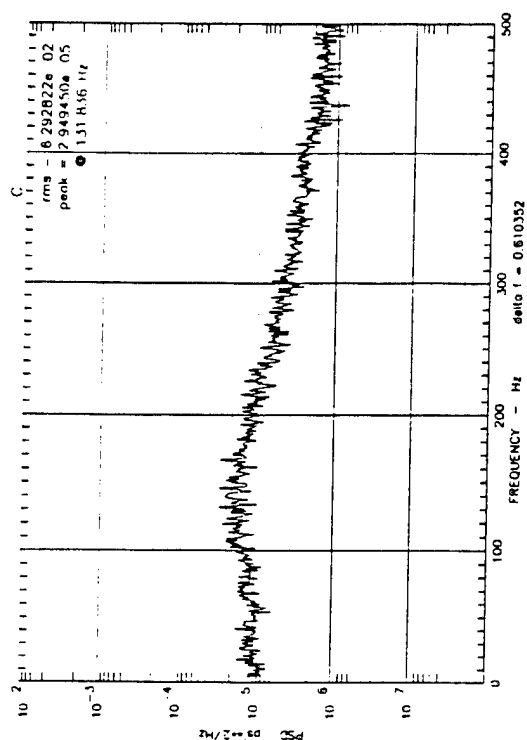
F 15 TPN 3379; alpha=32 beta= 4 bp=45



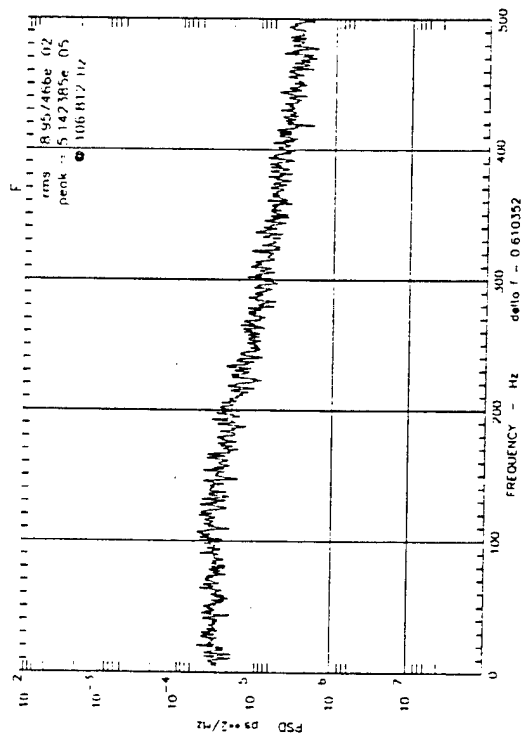
F 15 TPN 3379; alpha=32 beta= 4 bp=45



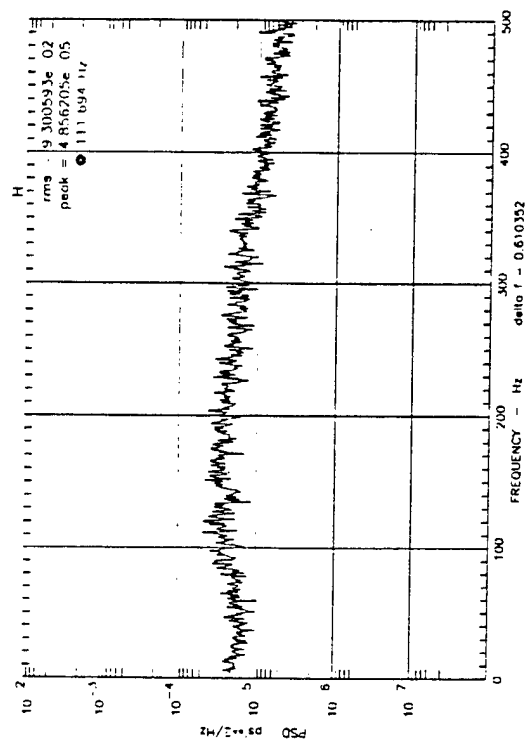
F 15 TPN 3379; alpha=32 beta= 4 bp=45



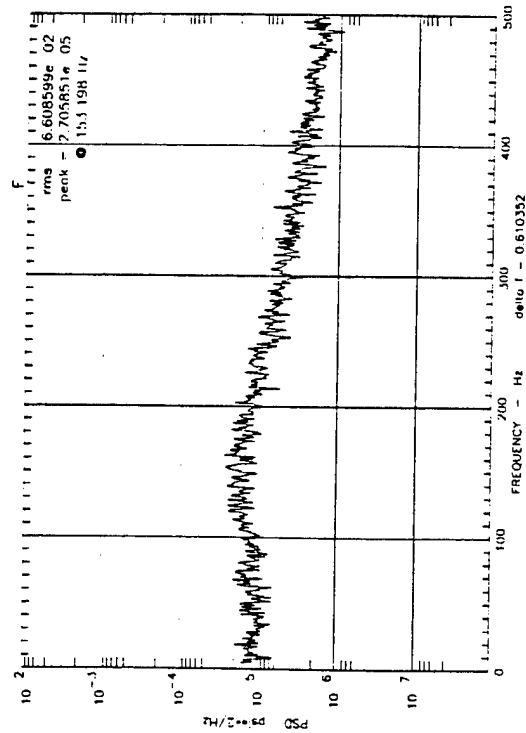
F 15 TPN 3379; alpha=32 beta= 4 bp=45



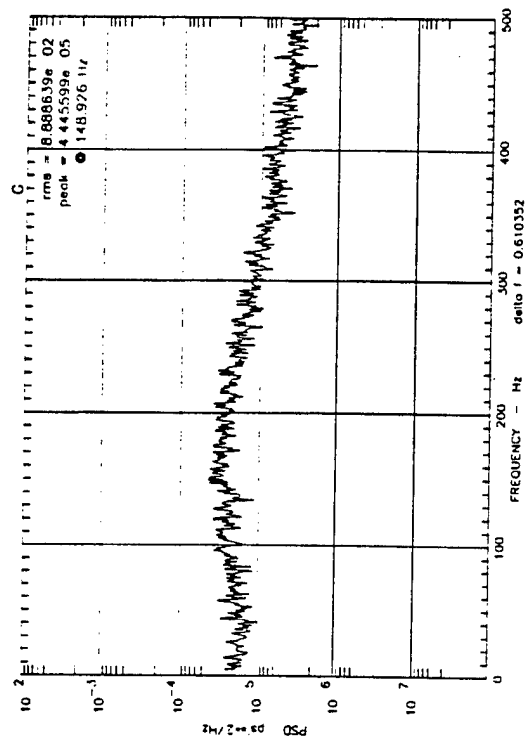
F 15 TPN 3379; alpha=32 beta= 4 bp=45



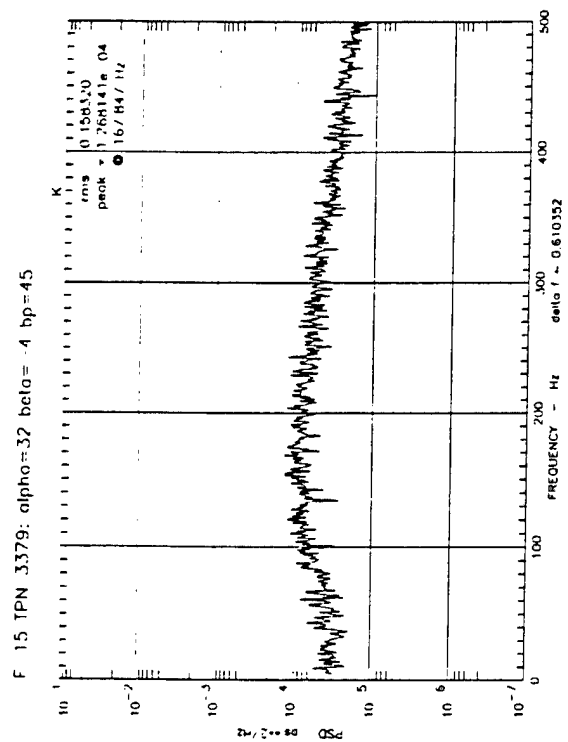
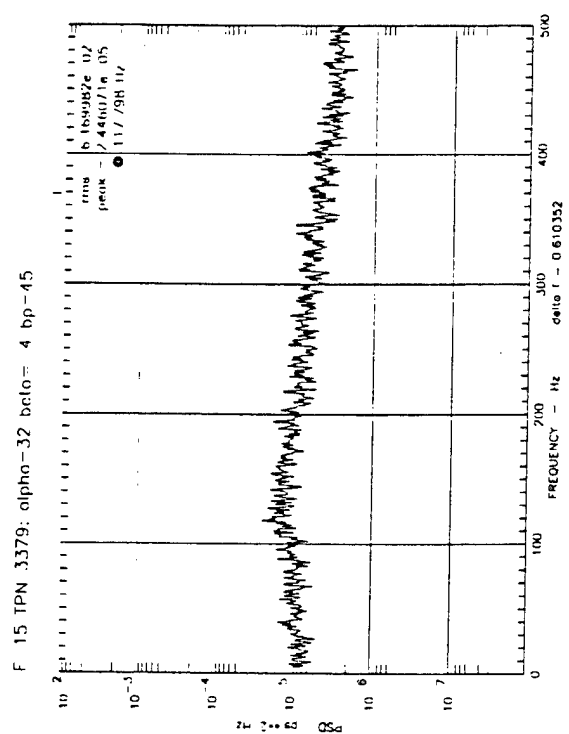
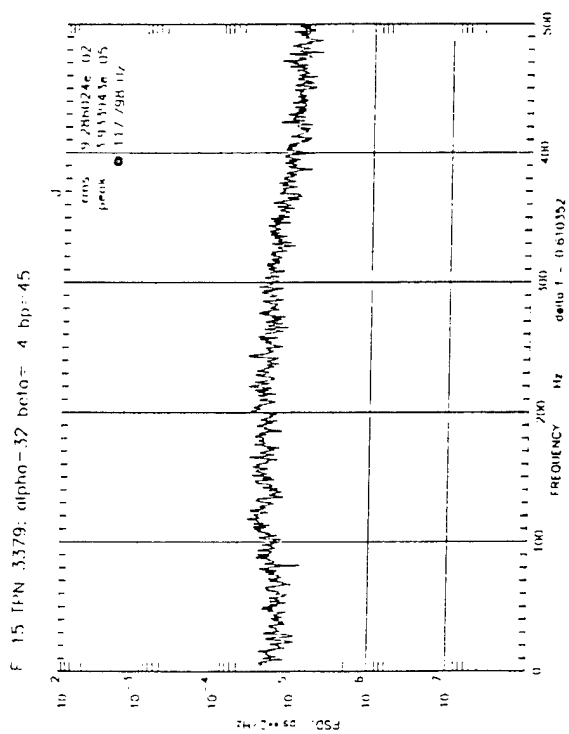
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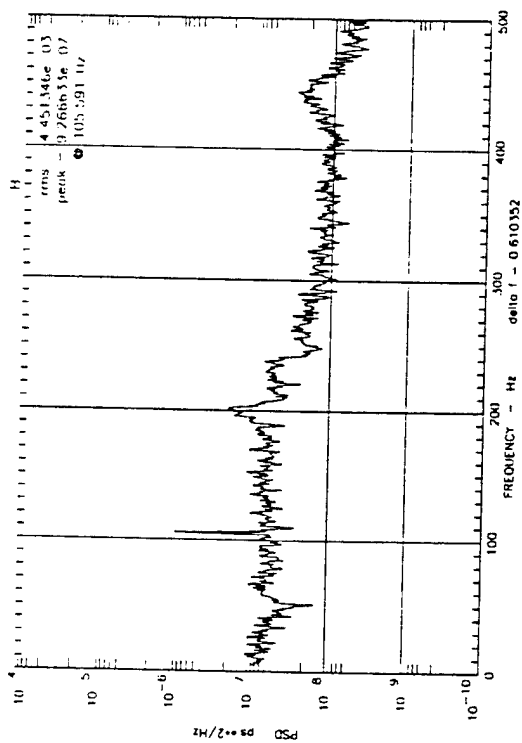
F 15 TPN 3379; alpha=32 beta= 4 bp=45



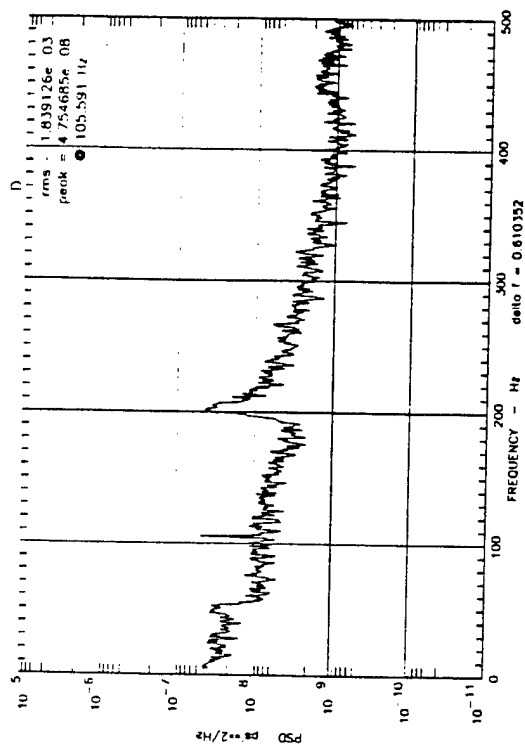




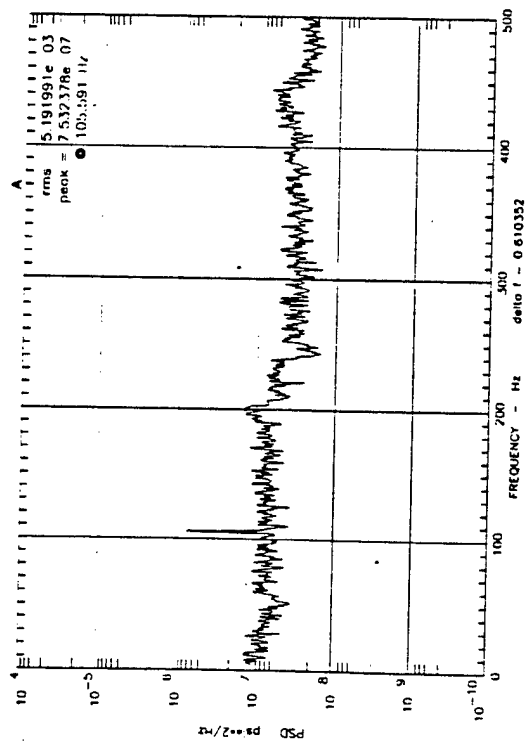
F 15 TPN 3044; alpha=16 beta=4 bp=65



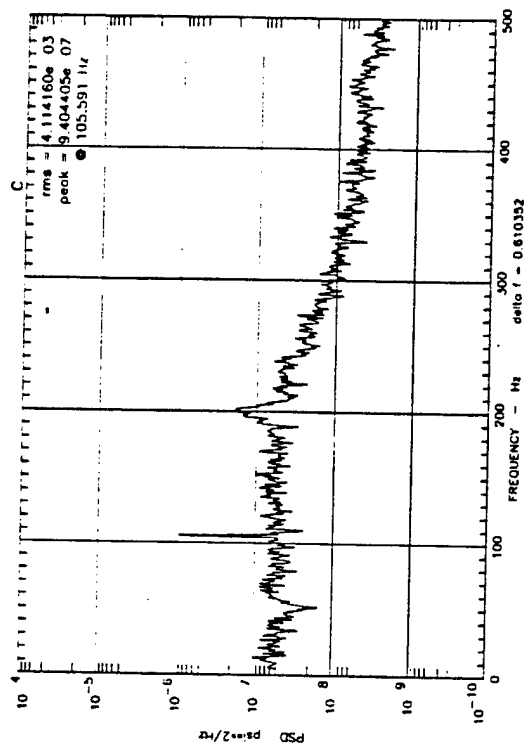
F 15 TPN 3044; alpha=16 beta=4 bp=65



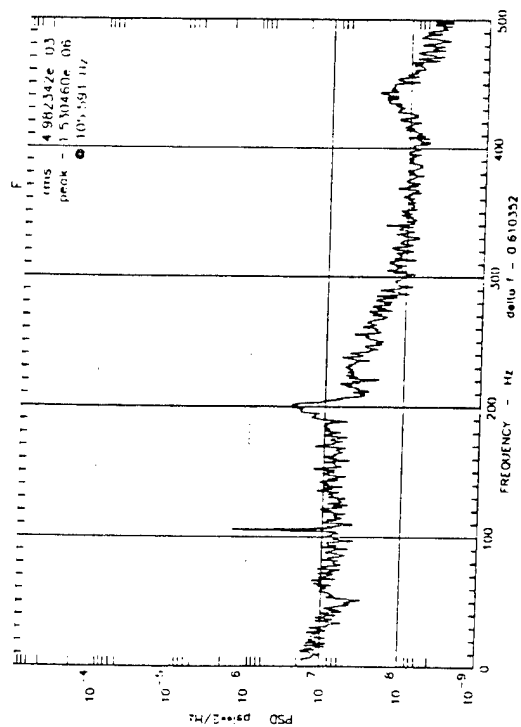
F 15 TPN 3044; alpha=16 beta=4 bp=65



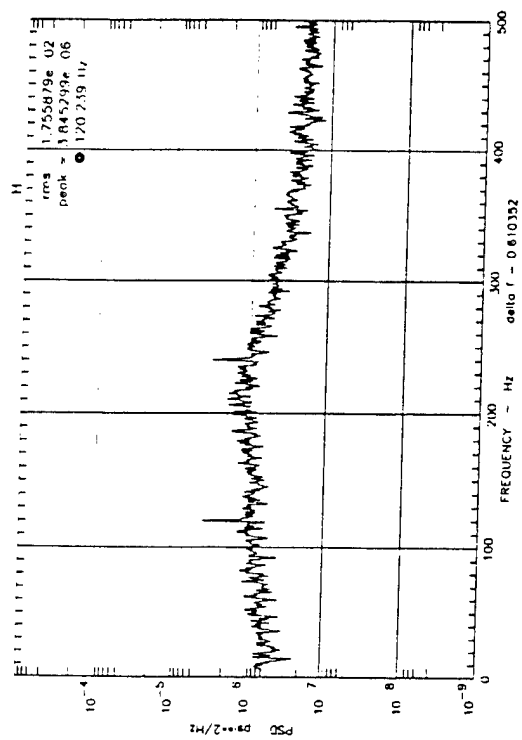
F 15 TPN 3044; alpha=16 beta=4 bp=65



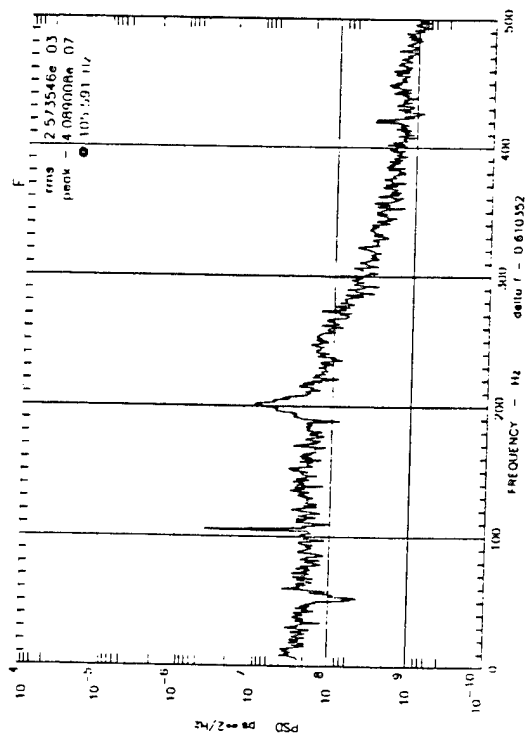
F 15 TPN 3044; alpha-16 beta-4 bp-65



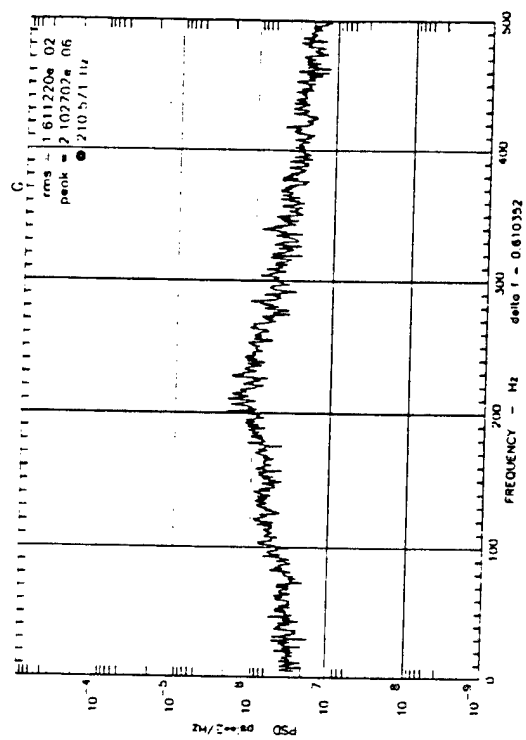
F 15 TPN 3044; alpha-16 beta-4 bp-65



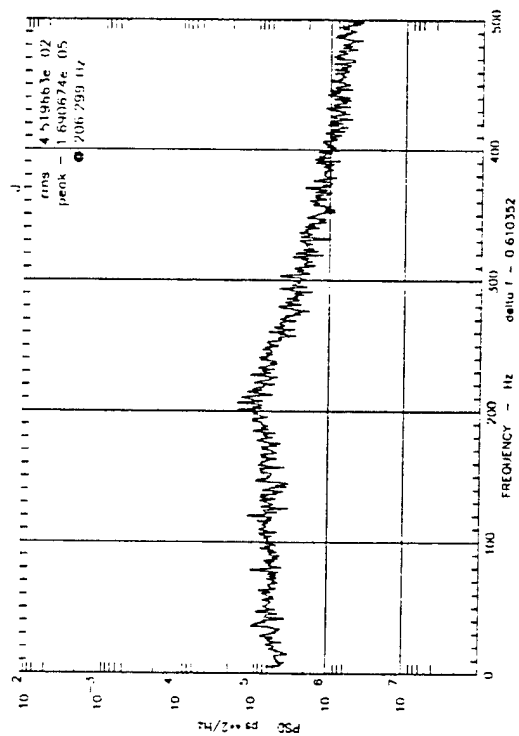
F 15 TPN 3044; alpha 16 beta 4 bp 65



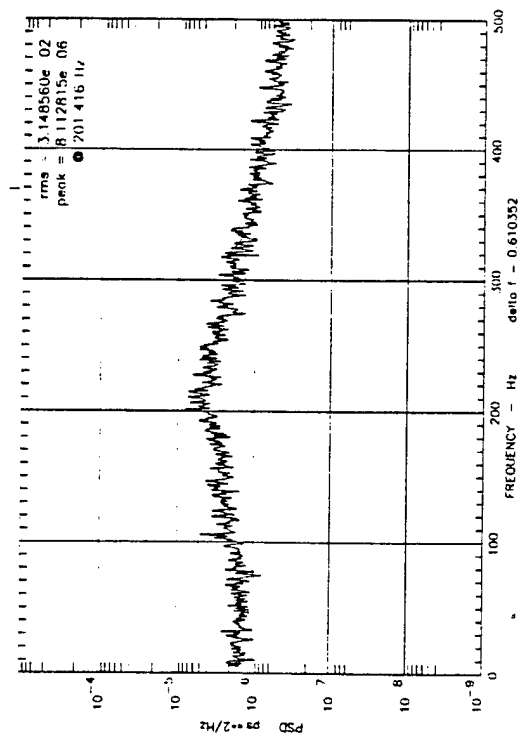
F 15 TPN 3044; alpha-16 beta-4 bp-65



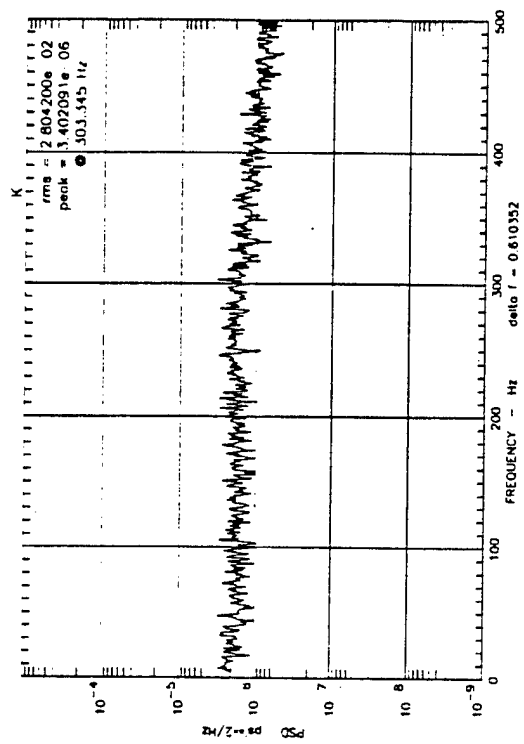
F 15 TPN 3044: alpha-16 beta-4 bp-65



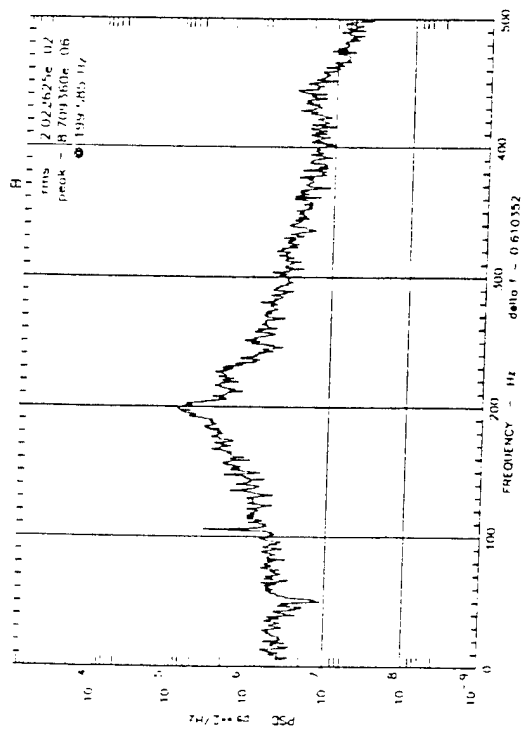
F 15 TPN 3044: alpha-16 beta-4 bp-65



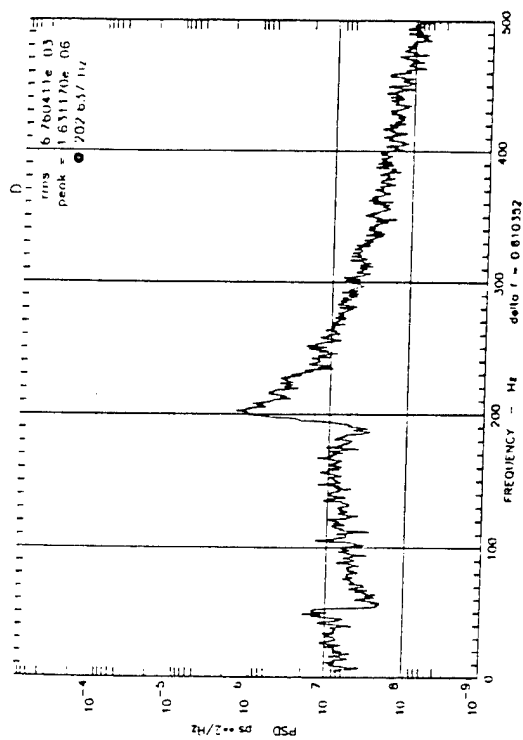
F 15 TPN 3044: alpha-16 beta-4 bp-65



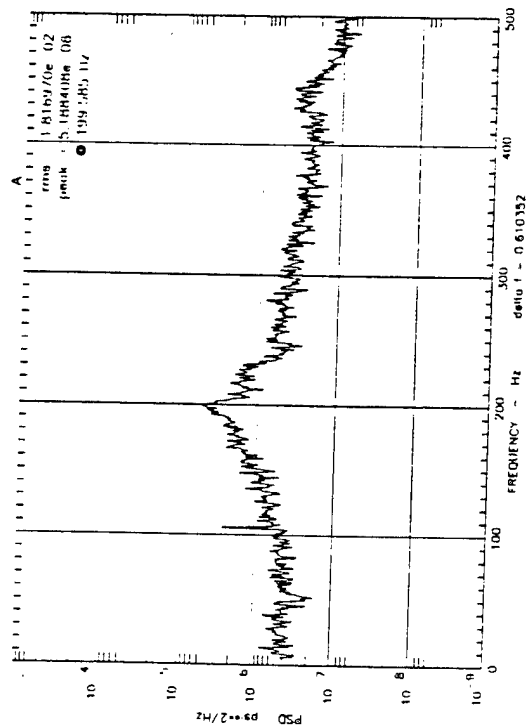
F 15 TPN 3046: alpha=20 beta=4 bp=65



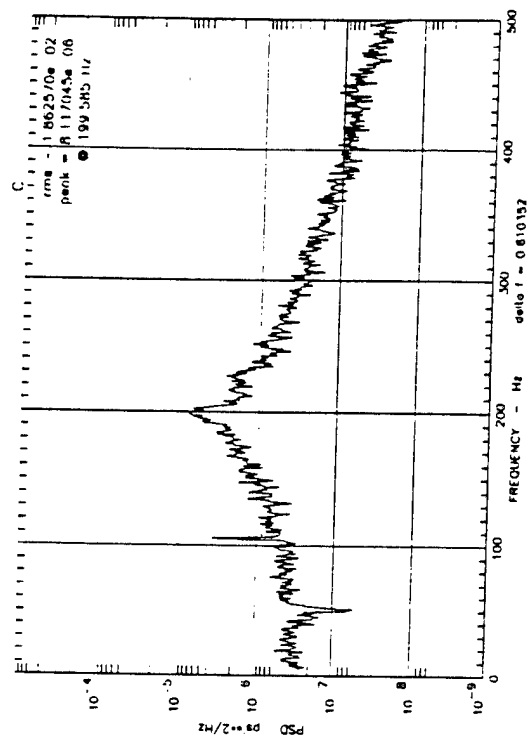
F 15 TPN 3046: alpha=20 beta=4 bp=65



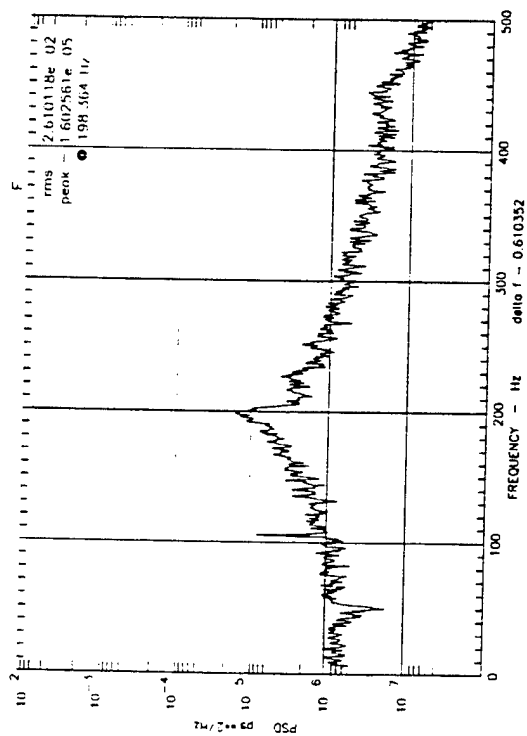
F 15 TPN 3046: alpha=20 beta=4 bp=65



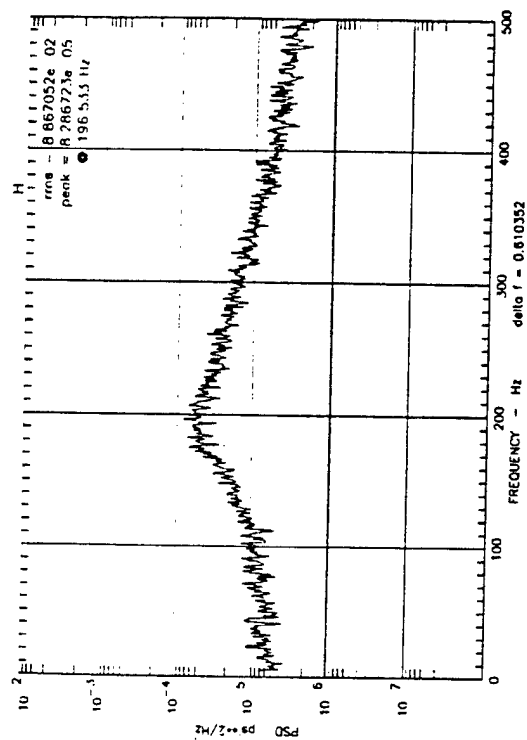
F 15 TPN 3046: alpha=20 beta=4 bp=65



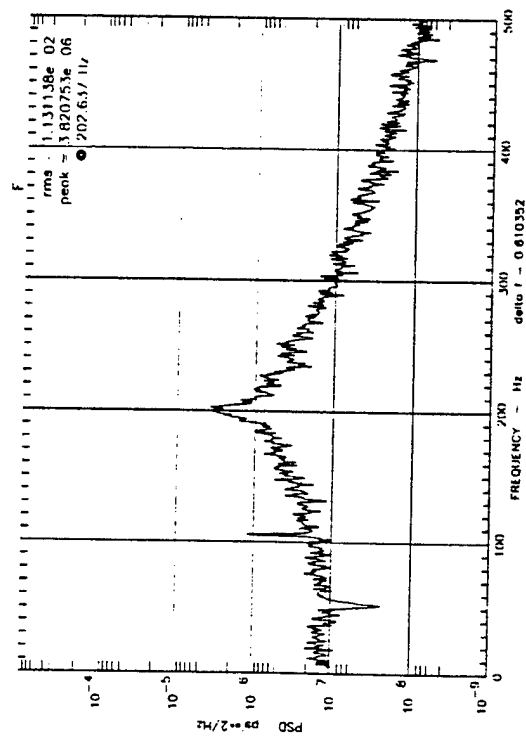
F 15 TPN 3046; alpha=20 beta=4 bp=65



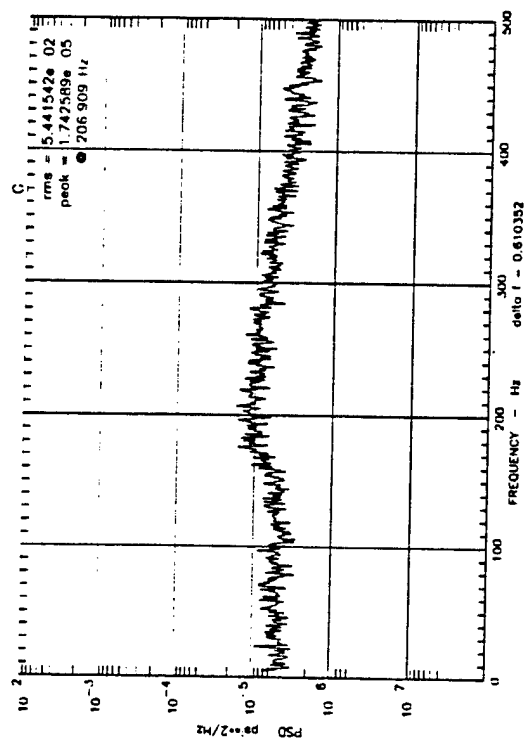
F 15 TPN 3046; alpha=20 beta=4 bp=65



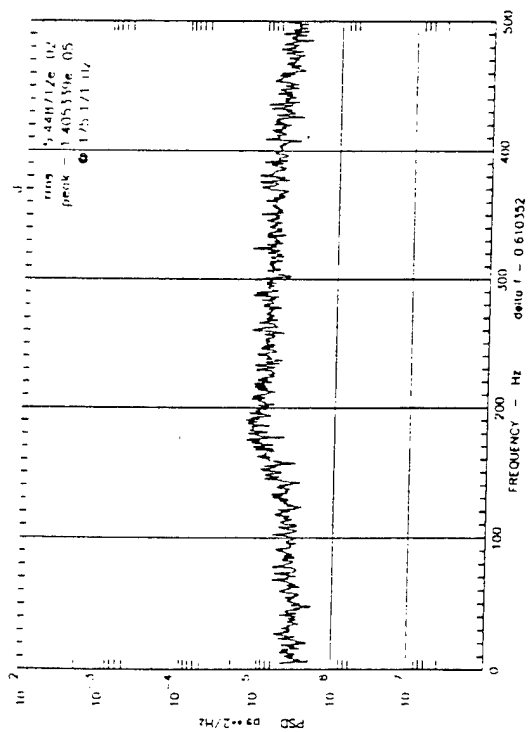
F 15 TPN 3046; alpha=20 beta=4 bp=65



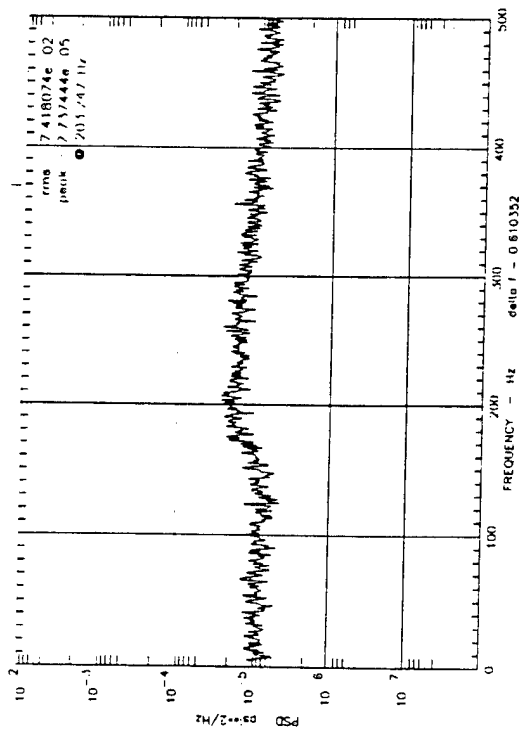
F 15 TPN 3046; alpha=20 beta=4 bp=65



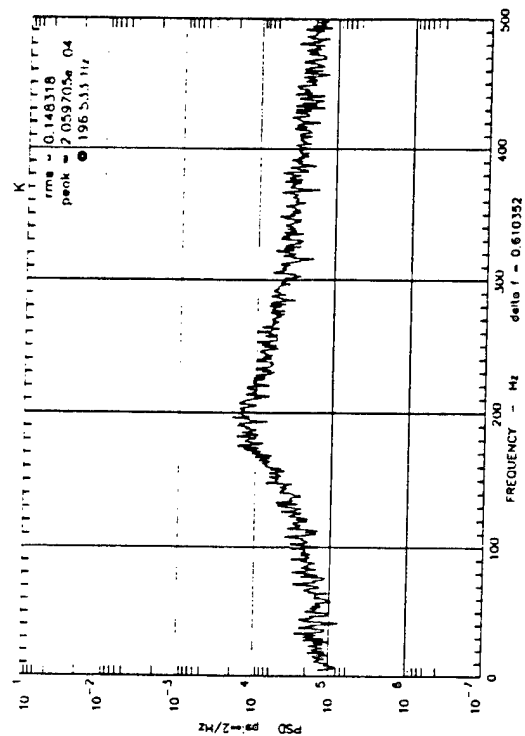
F 15 TPN 3046: alpha=20 beta=4 bp=65



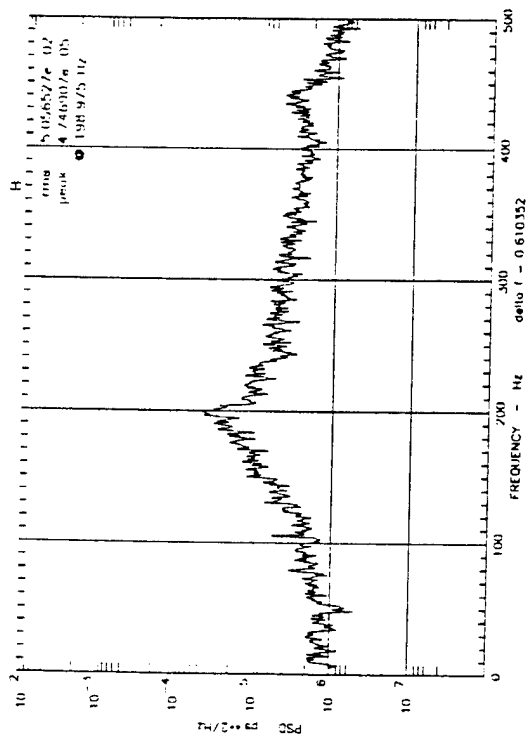
F 15 TPN 3046: alpha=20 beta=4 bp=65



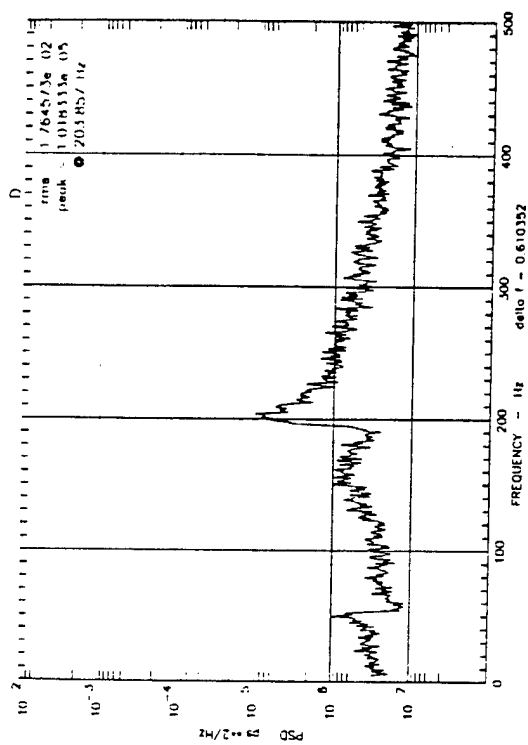
F 15 TPN 3046: alpha=20 beta=4 bp=65



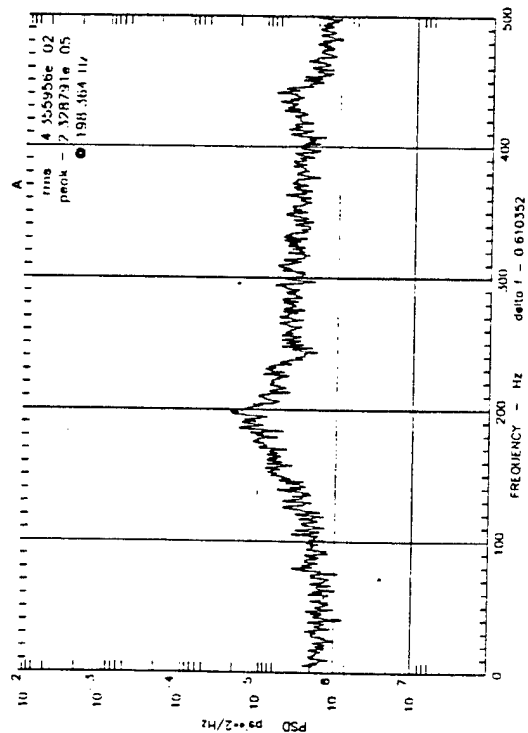
F 15 TPN 3048: alpha=24 beta=4 bp=65



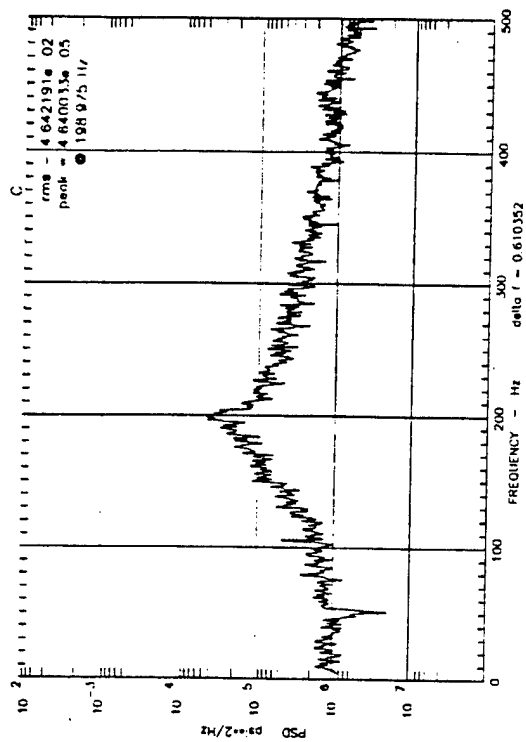
F 15 TPN 3048: alpha=24 beta=4 bp=65



F 15 TPN 3048: alpha=24 beta=4 bp=65

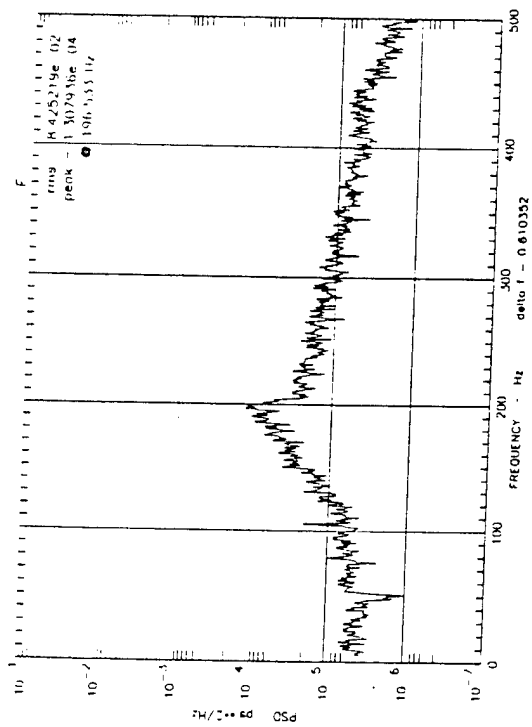


F 15 TPN 3048: alpha=24 beta=4 bp=65

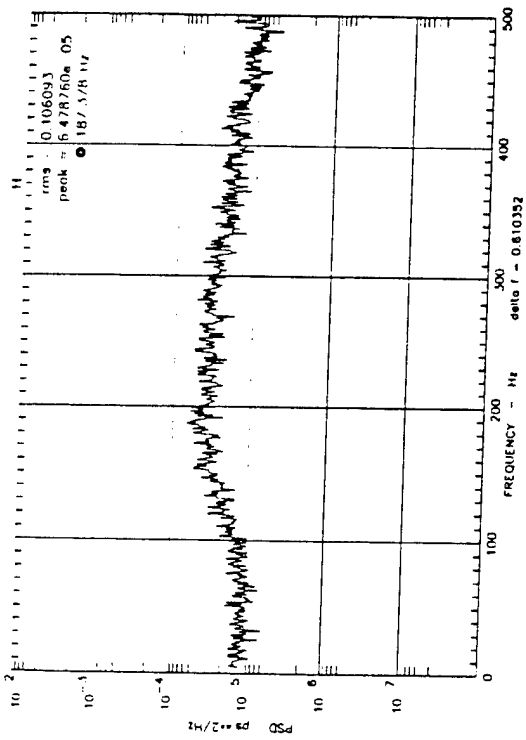




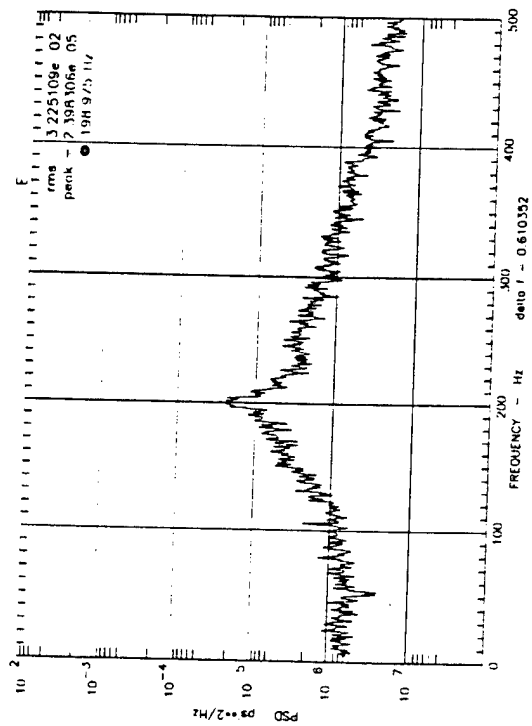
F 15 TPN 3048; alpha=24 beta=4 bp=65



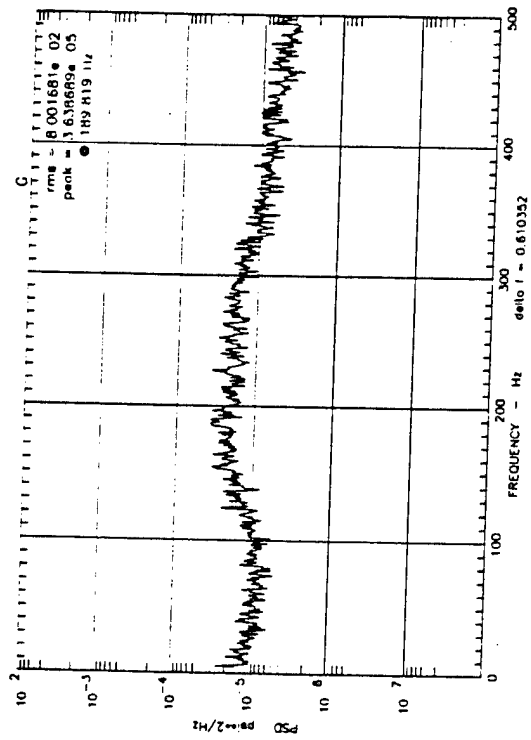
F 15 TPN 3048; alpha=24 beta=4 bp=65



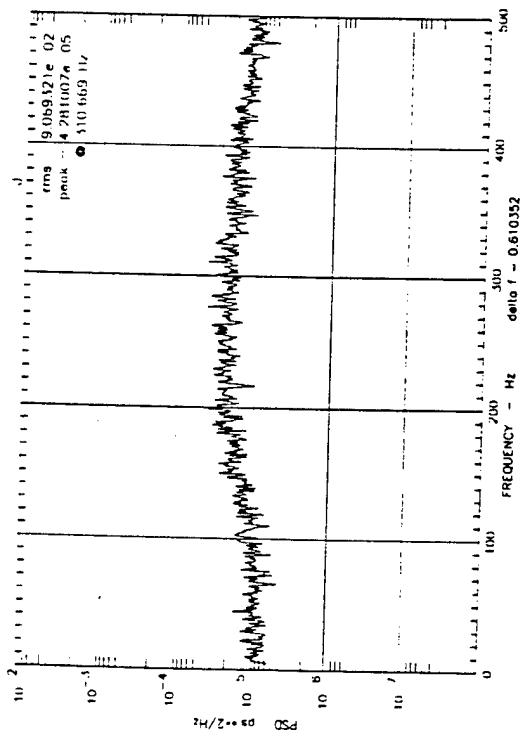
F 15 TPN 3048; alpha=24 beta=4 bp=65



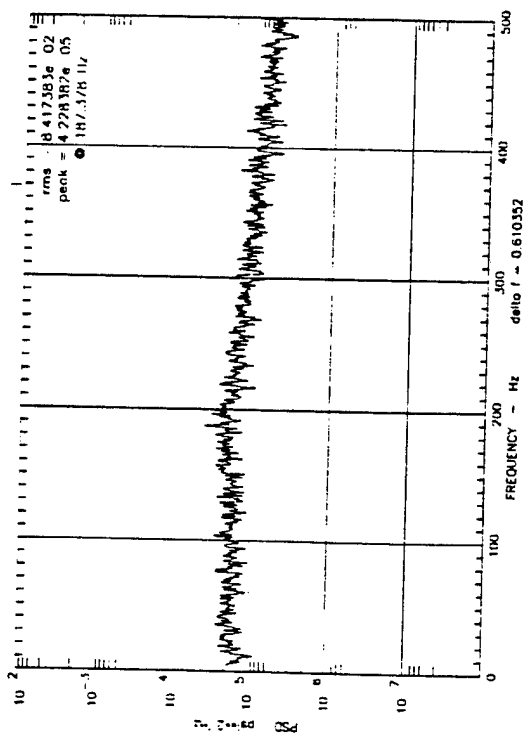
F 15 TPN 3048; alpha=24 beta=4 bp=65



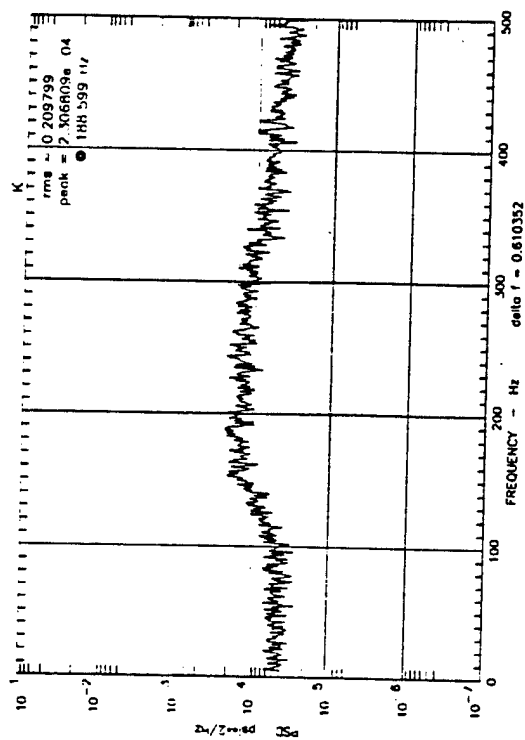
F 15 TPN 3048: alpha=24 beta=4 bp=65



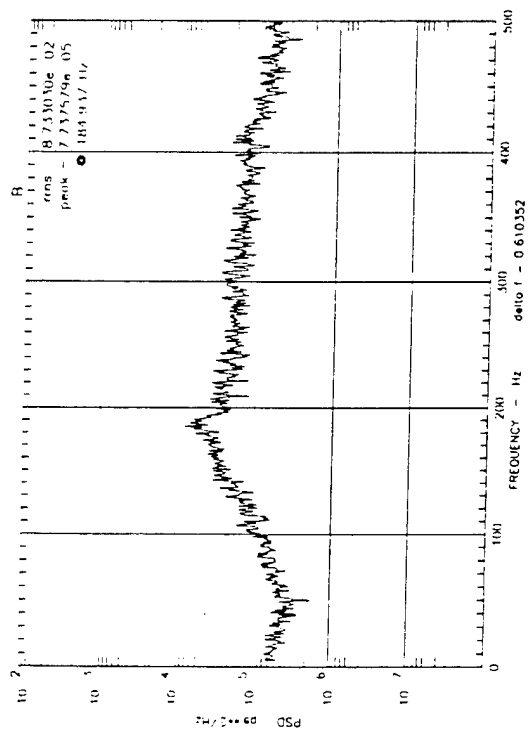
F 15 TPN 3048: alpha=24 beta=4 bp=65



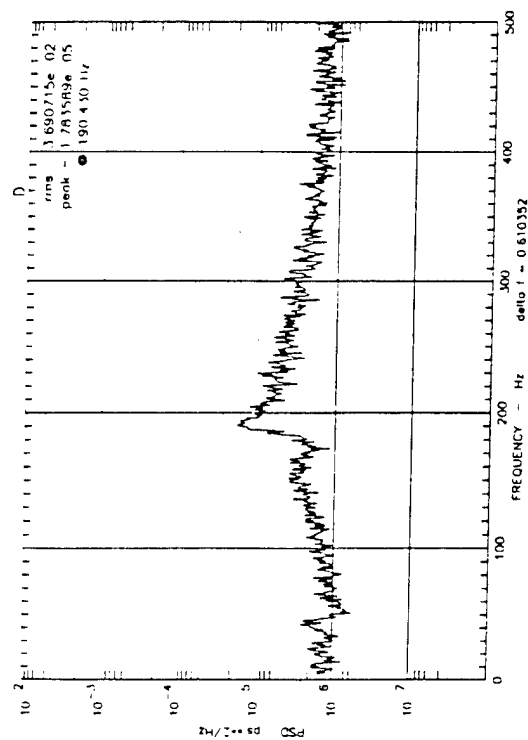
F 15 TPN 3048: alpha=24 beta=4 bp=65



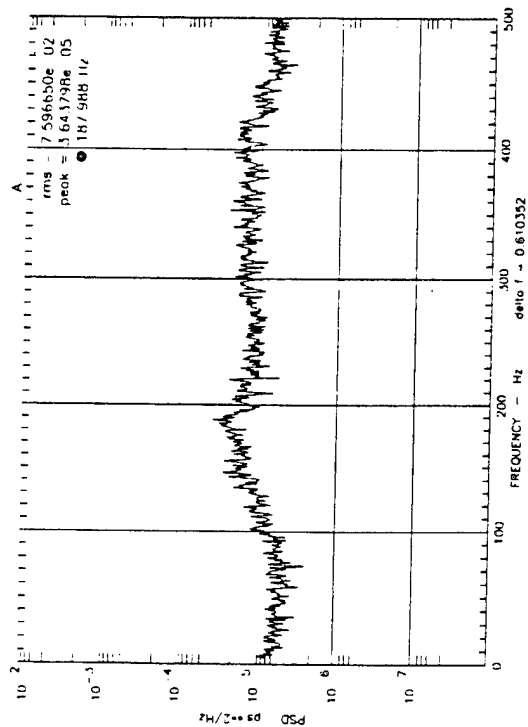
F 15 TPN 2961; alpha=28 beta=4 bp=65



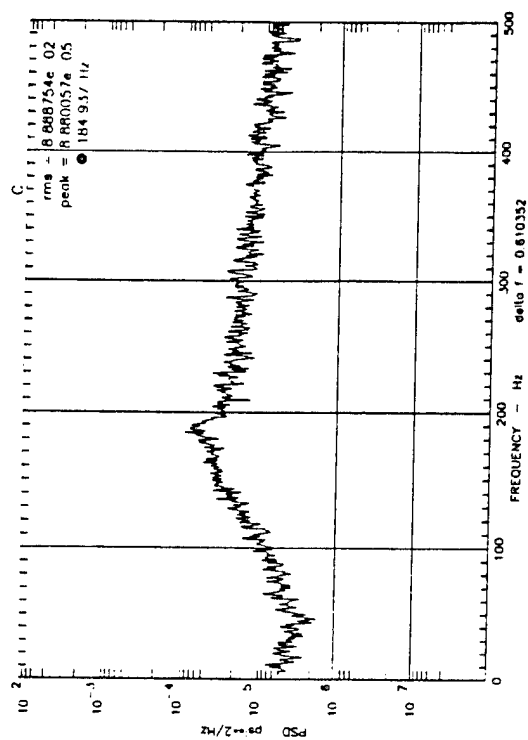
F 15 TPN 2961; alpha=28 beta=4 bp=65



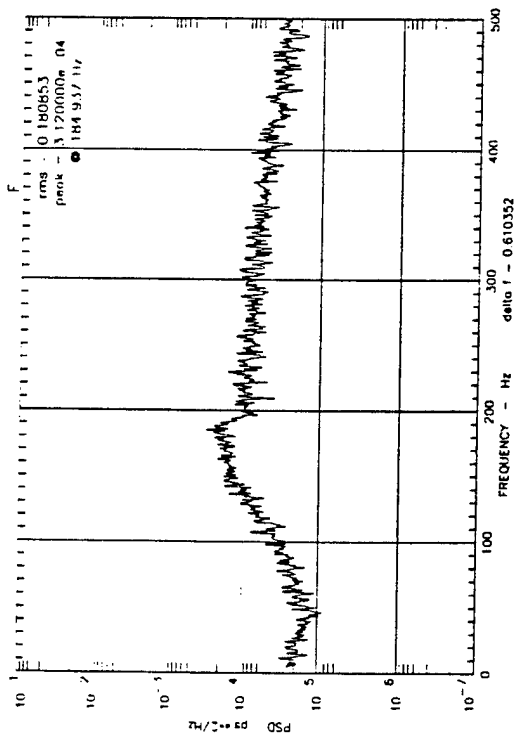
F 15 TPN 2961; alpha=28 beta=4 bp=65



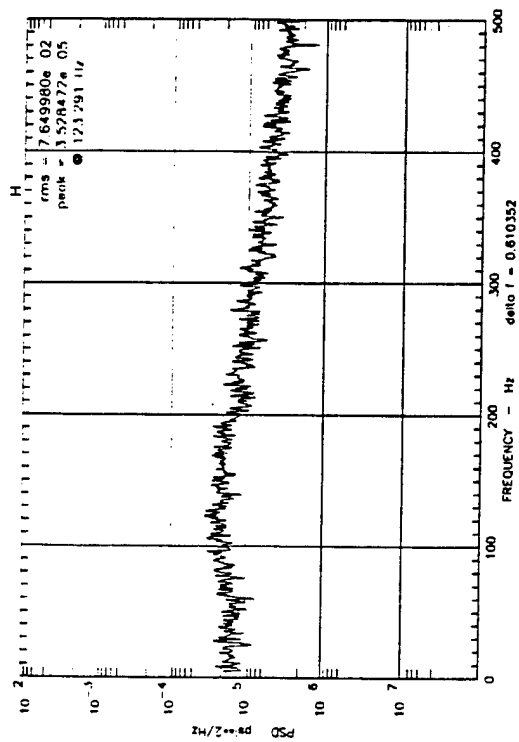
F 15 TPN 2961; alpha=28 beta=4 bp=65



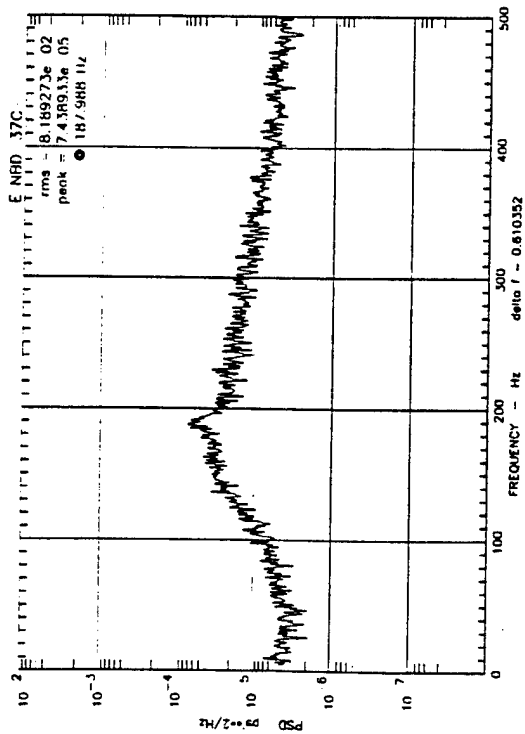
F 15 TPN 2961: alpha=28 beta=4 bp=65



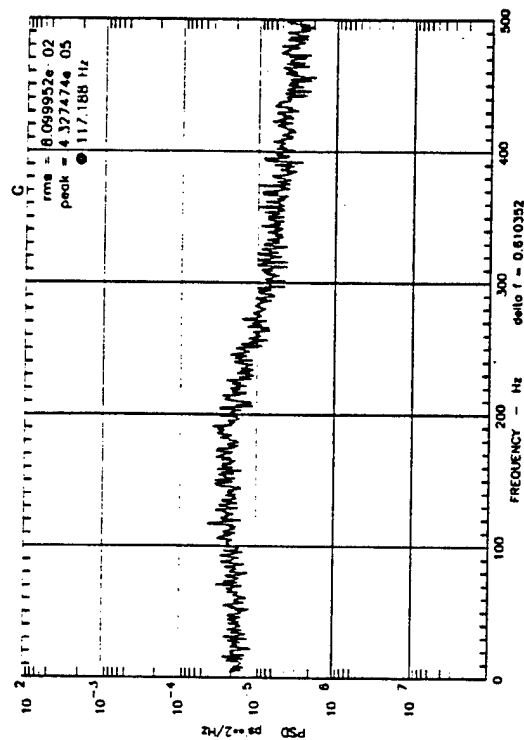
F 15 TPN 2961: alpha=28 beta=4 bp=65



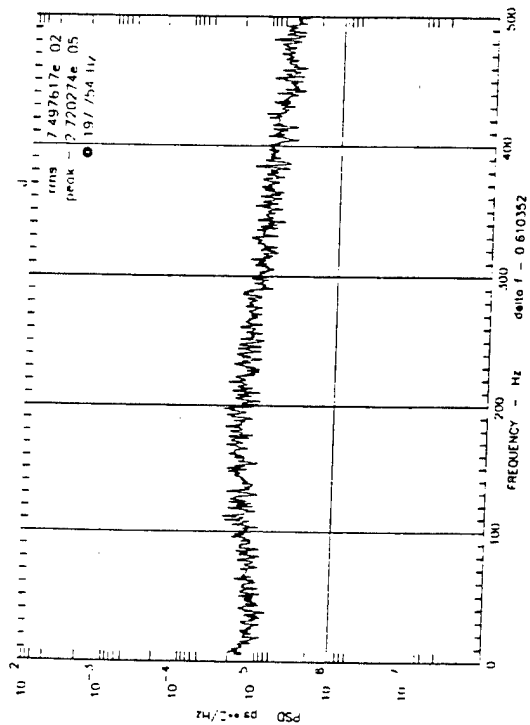
F 15 TPN 2961: alpha=28 beta=4 bp=65



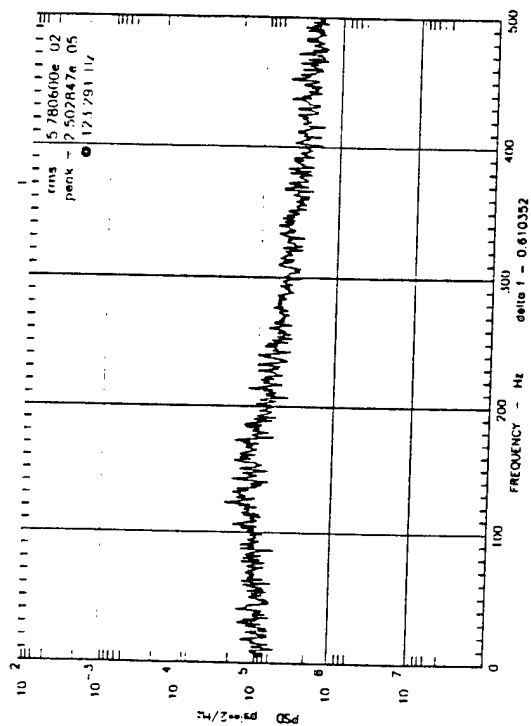
F 15 TPN 2961: alpha=28 beta=4 bp=65



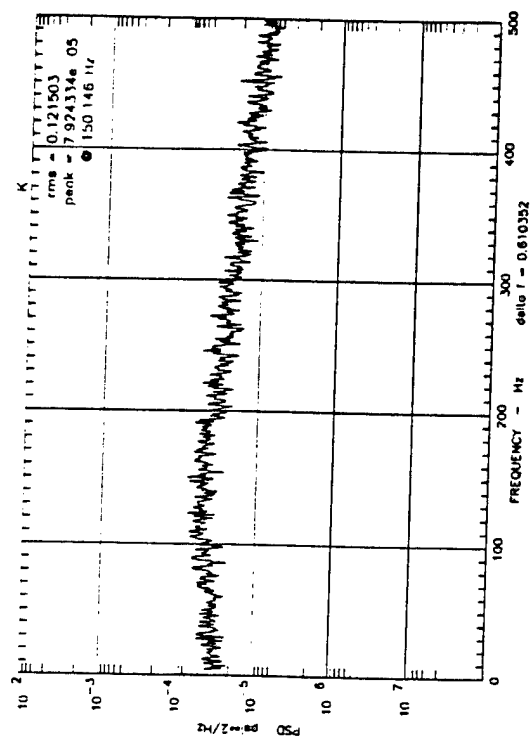
F 15 TPN 2961: alpha=28 beta=4 bp=65



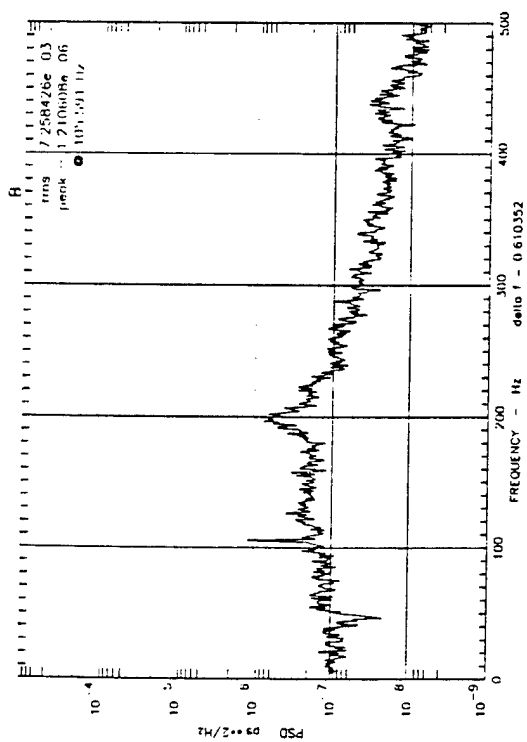
F 15 TPN 2961: alpha=28 beta=4 bp=65



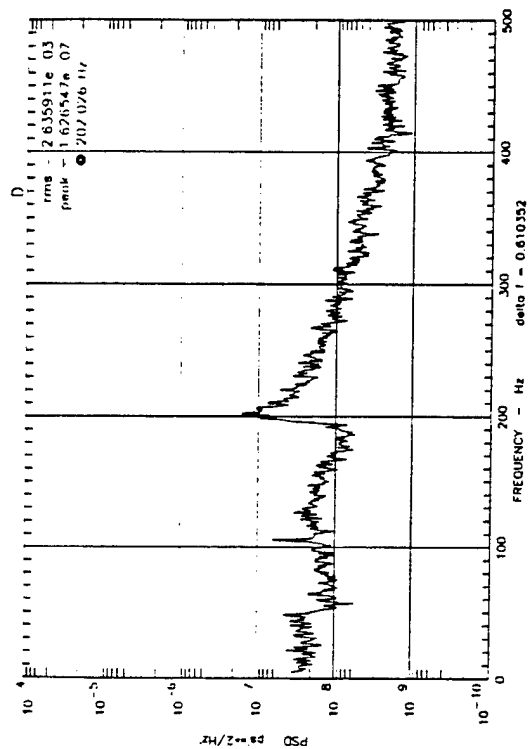
F 15 TPN 2961: alpha=28 beta=4 bp=65



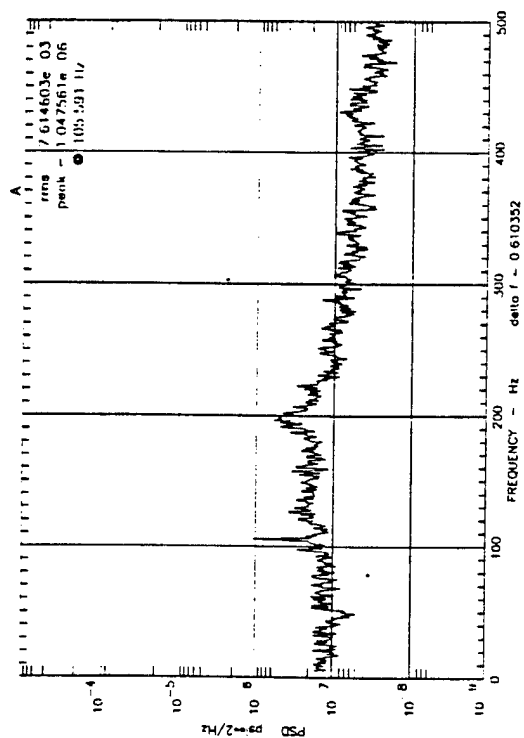
F 15 TPN 3038: alpha=16 beta=0 bp=65



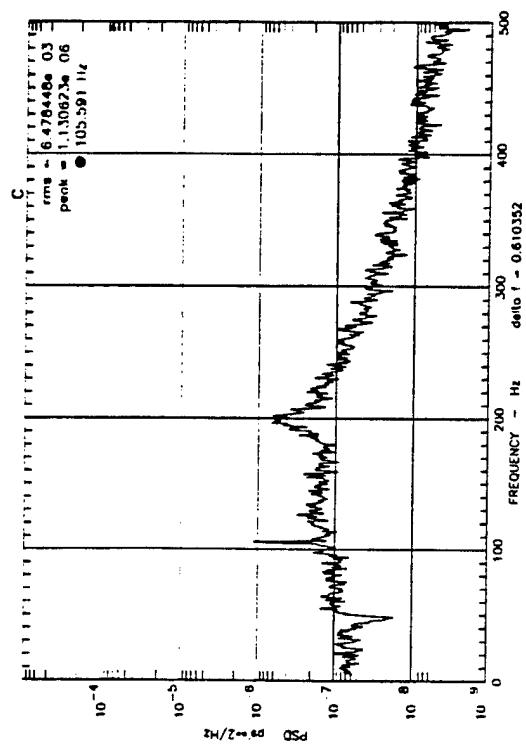
F 15 TPN 3038: alpha=16 beta=0 bp=65



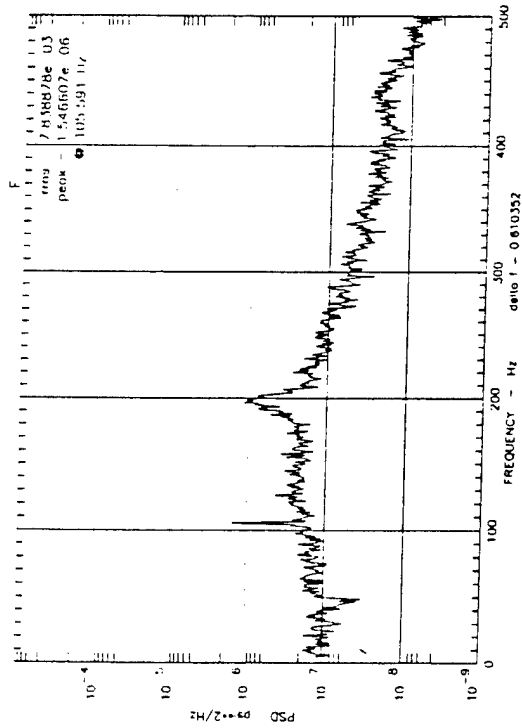
F 15 TPN 3038: alpha=16 beta=0 bp=65



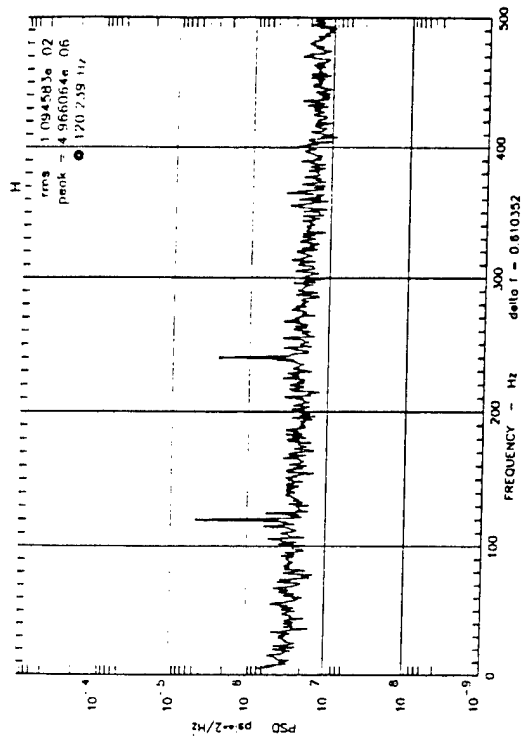
F 15 TPN 3038: alpha=16 beta=0 bp=65



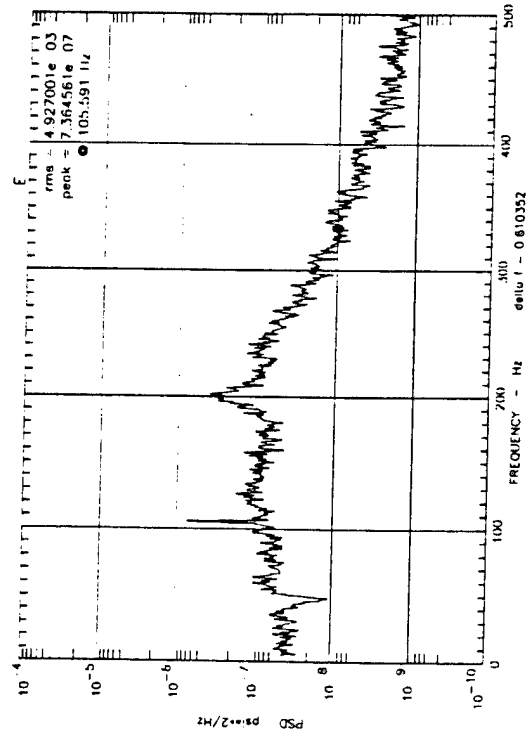
F 15 TPN 3038: alpha=16 beta=0 bp=65



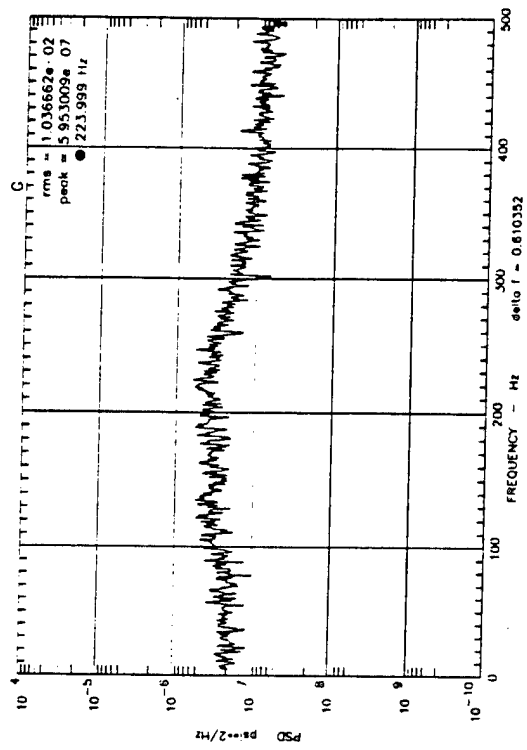
F 15 TPN 3038: alpha=16 beta=0 bp=65



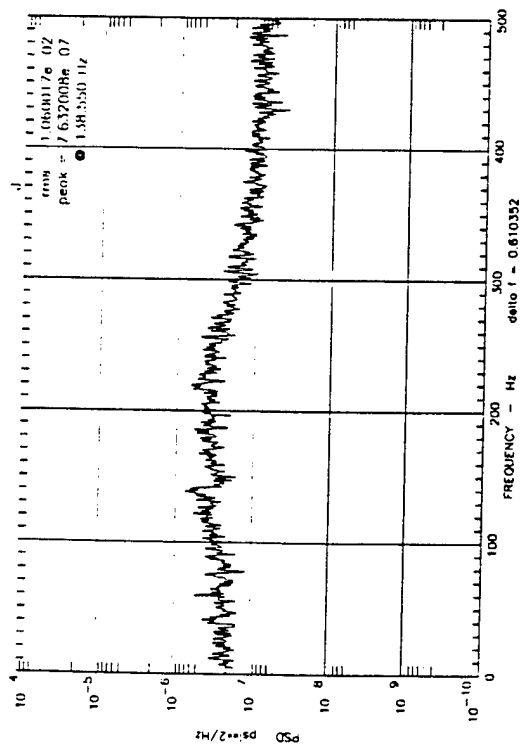
F 15 TPN 3038: alpha=16 beta=0 bp=65



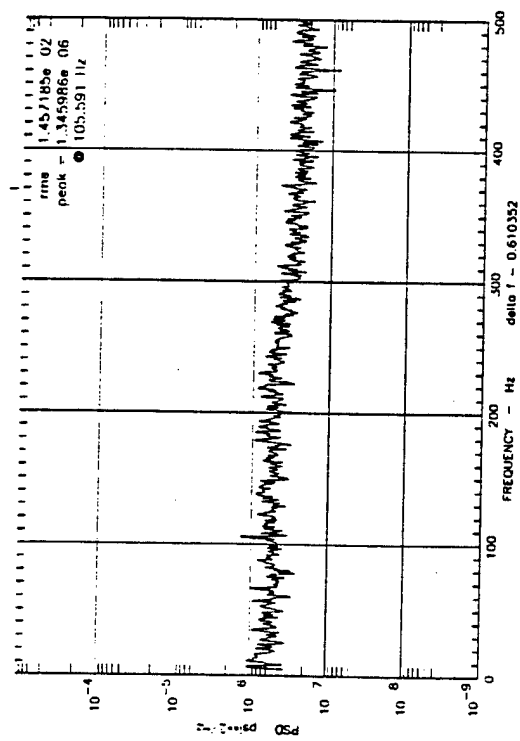
F 15 TPN 3038: alpha=16 beta=0 bp=65



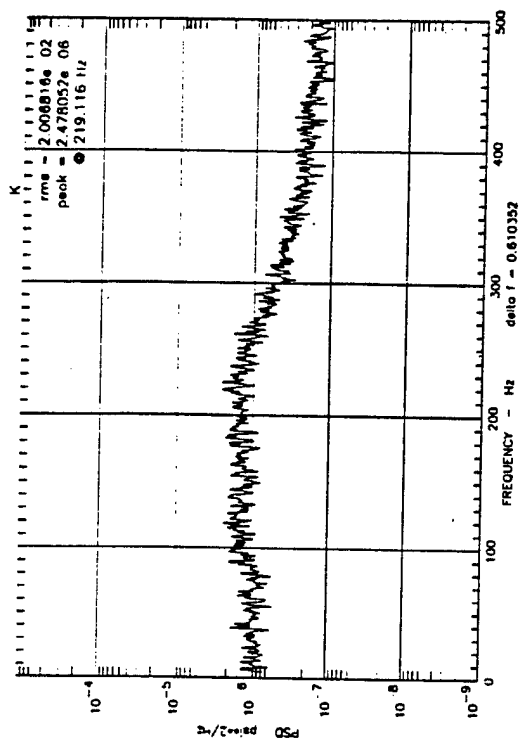
F 15 TPN 3038: alpha=16 beta=0 bp=65



F 15 TPN 3038: alpha=16 beta=0 bp=65

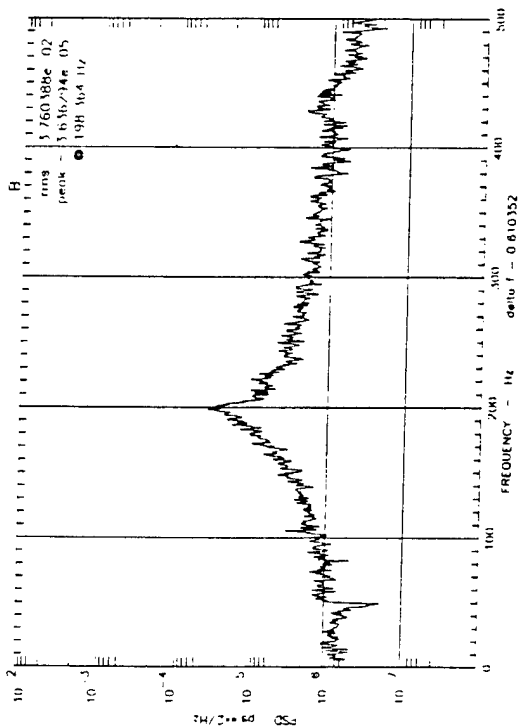


F 15 TPN 3038: alpha=16 beta=0 bp=65

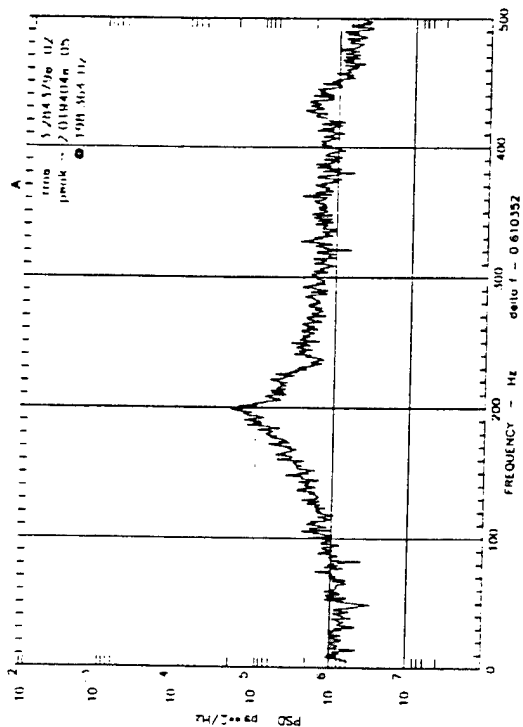




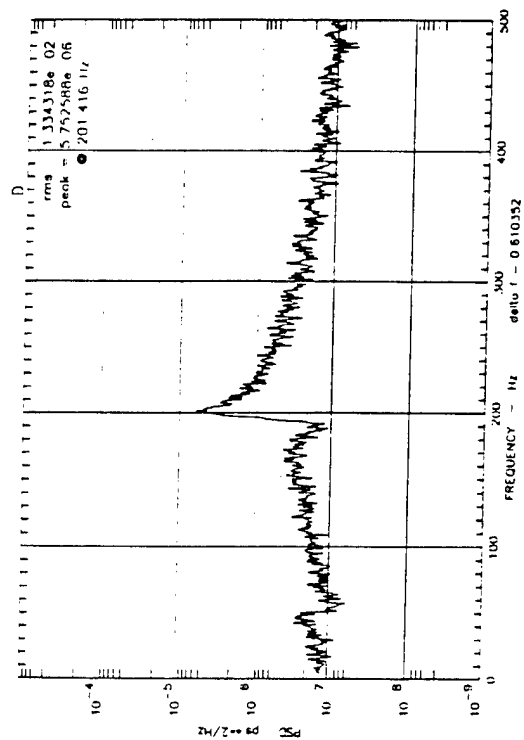
F 15 IPN 3040; alpha=20 beta=0 bp=65



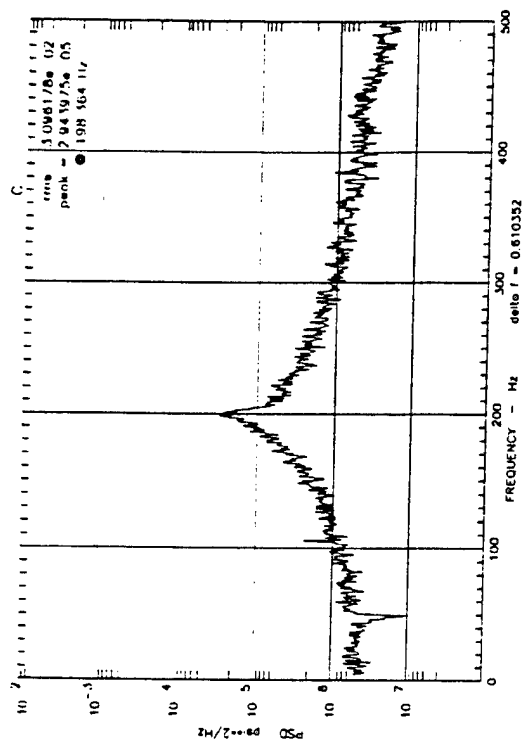
F 15 IPN 3040; alpha=20 beta=0 bp=65



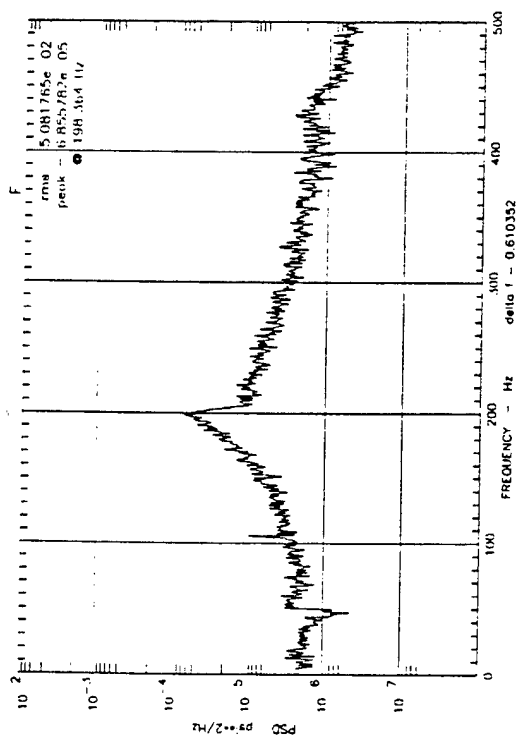
F 15 IPN 3040; alpha=20 beta=0 bp=65



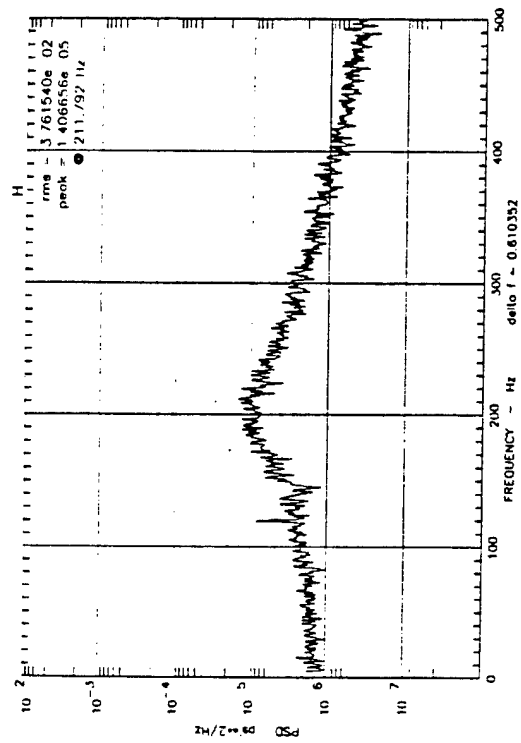
F 15 IPN 3040; alpha=20 beta=0 bp=65



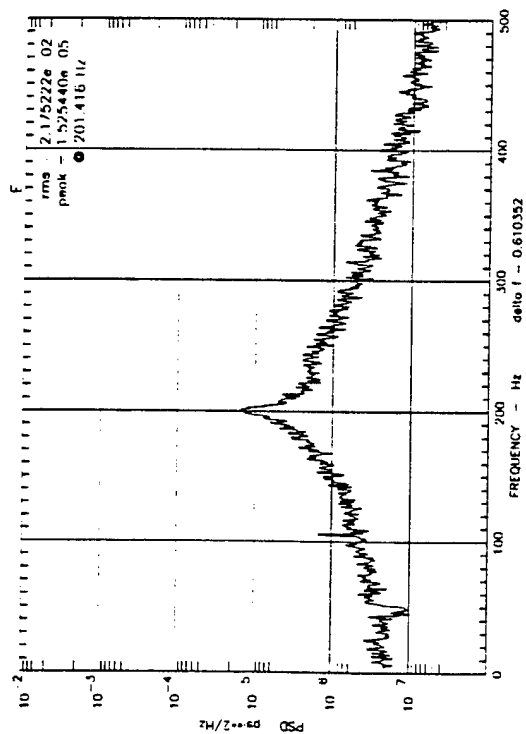
F 15 TPN 3040: alpha=20 beta=0 bp=65



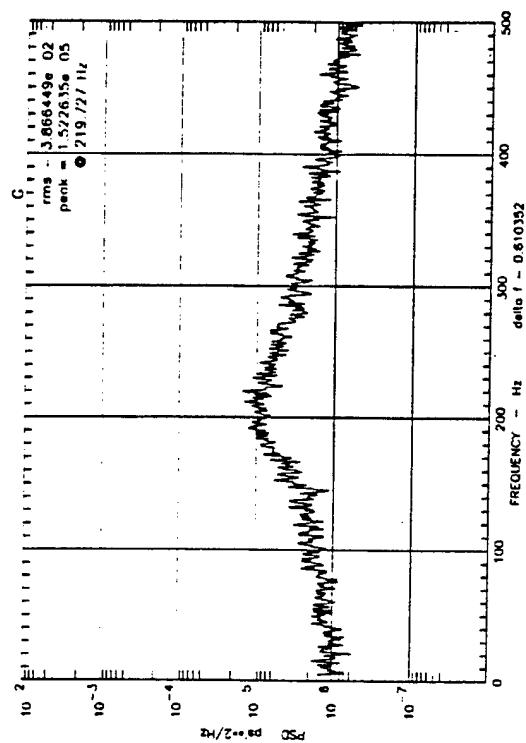
F 15 TPN 3040: alpha=20 beta=0 bp=65



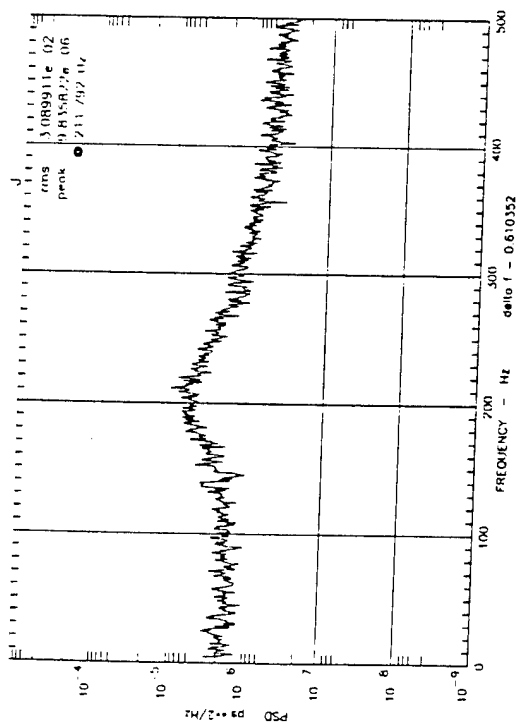
F 15 TPN 3040: alpha=20 beta=0 bp=65



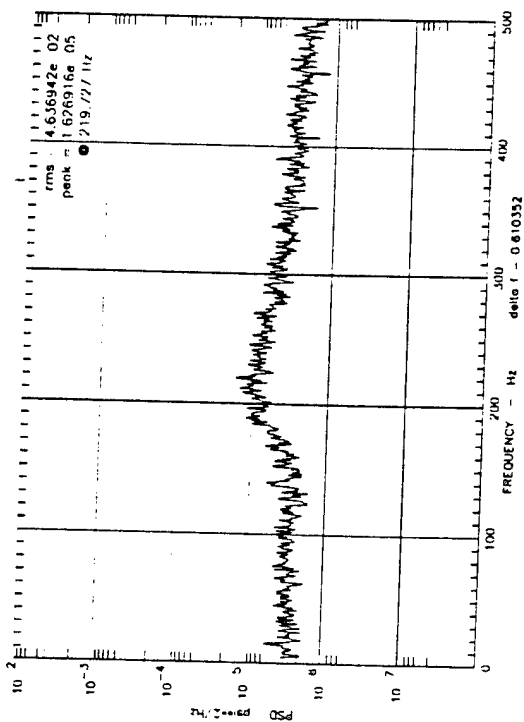
F 15 TPN 3040: alpha=20 beta=0 bp=65



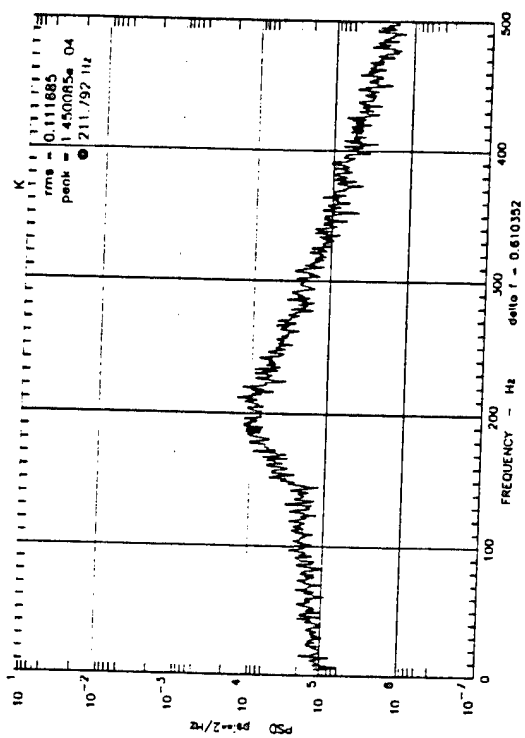
F 15 TPN 3040: alpha=20 beta=0 bp=65



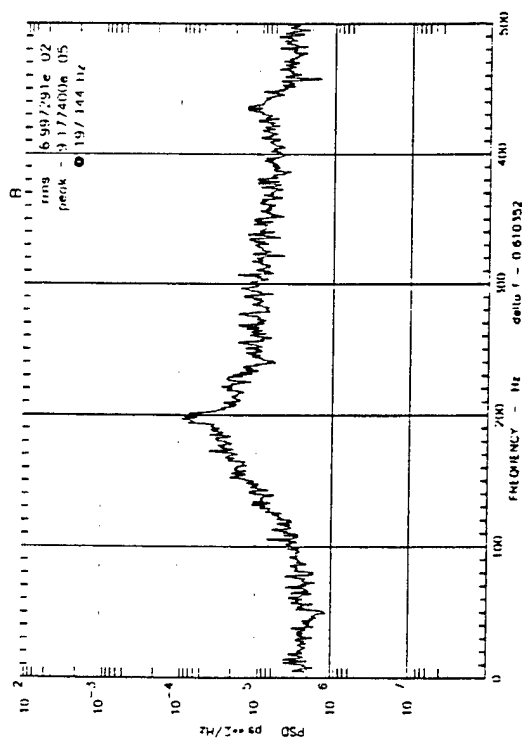
F 15 TPN 3040: alpha=20 beta=0 bp=65



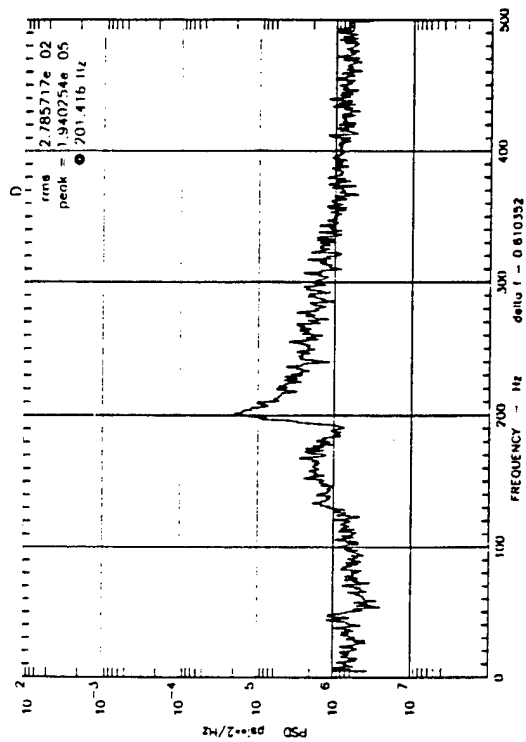
F 15 TPN 3040: alpha=20 beta=0 bp=65



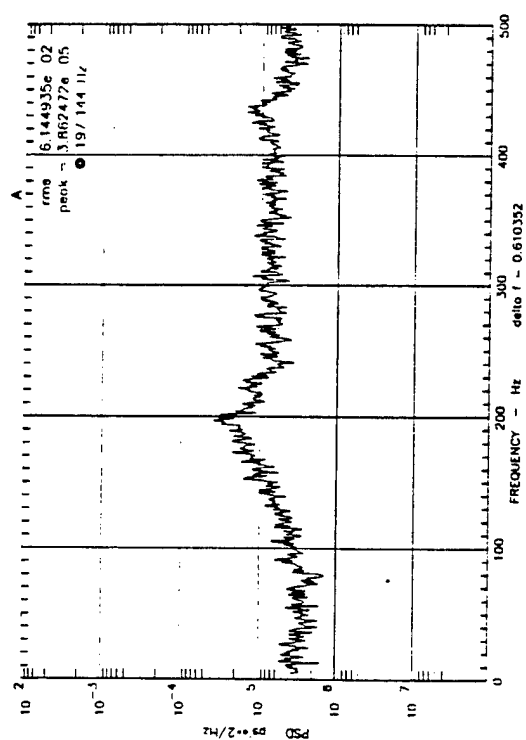
F 15 TPN 3042; alpha=24 beta=0 bp=65



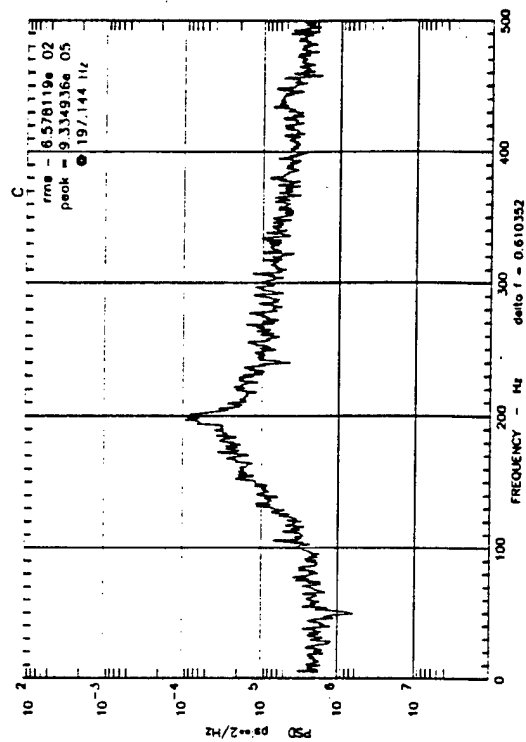
F 15 TPN 3042; alpha=24 beta=0 bp=65



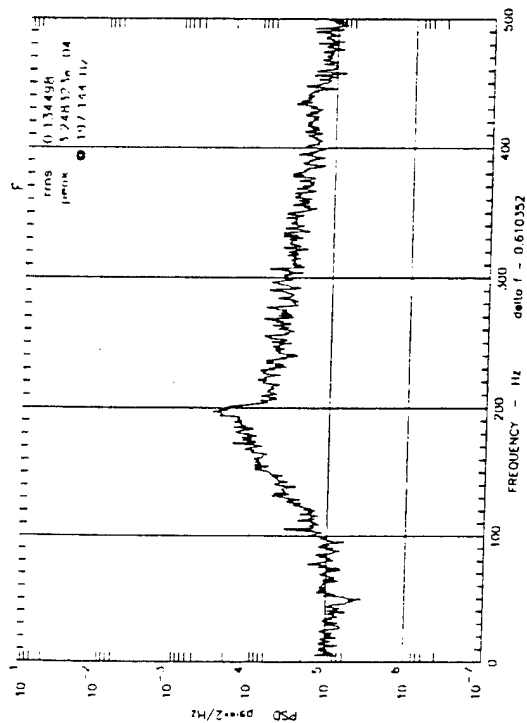
F 15 TPN 3042; alpha=24 beta=0 bp=65



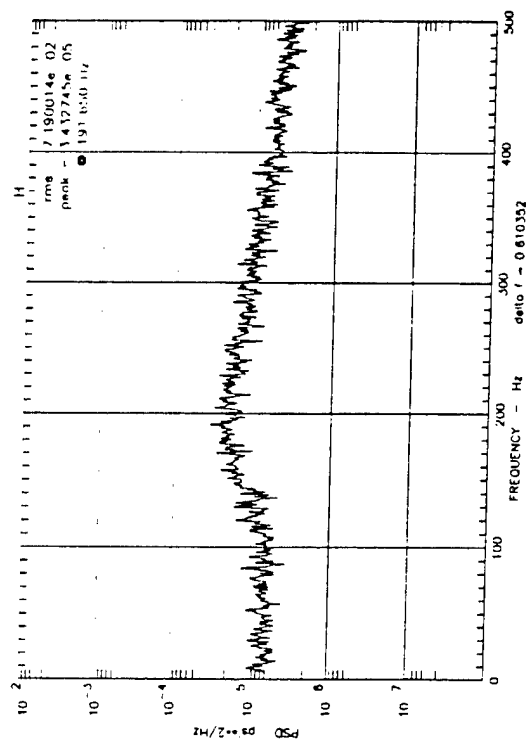
F 15 TPN 3042; alpha=24 beta=0 bp=65



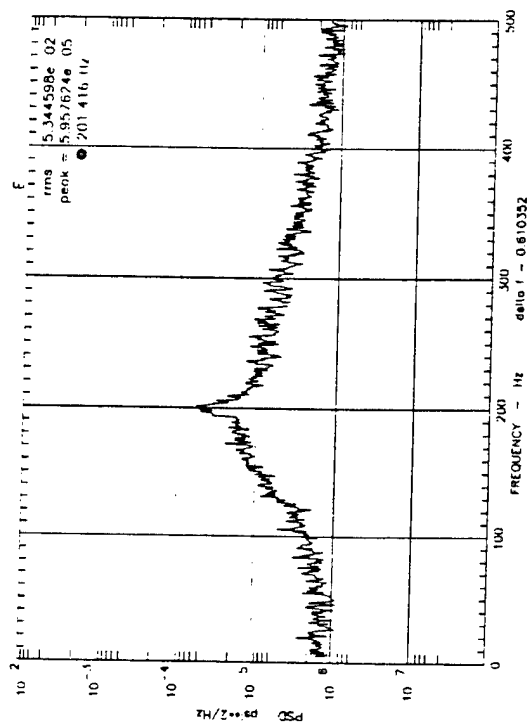
F 15 TPN 3042: alpha=24 beta=0 bp=65



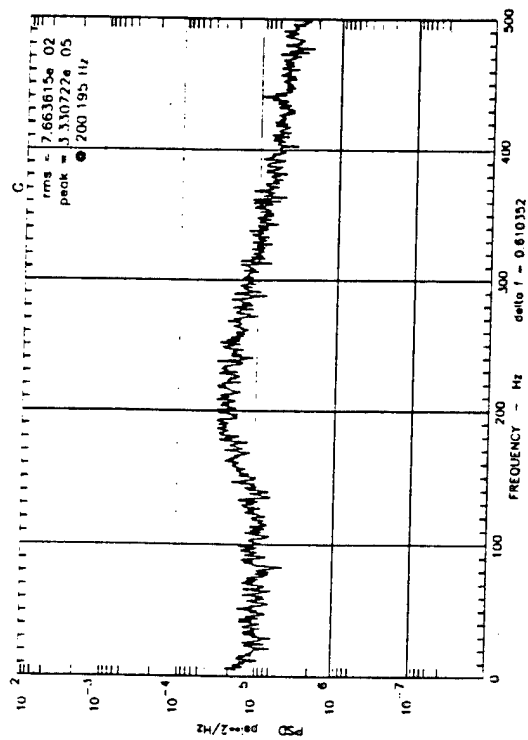
F 15 TPN 3042: alpha=24 beta=0 bp=65

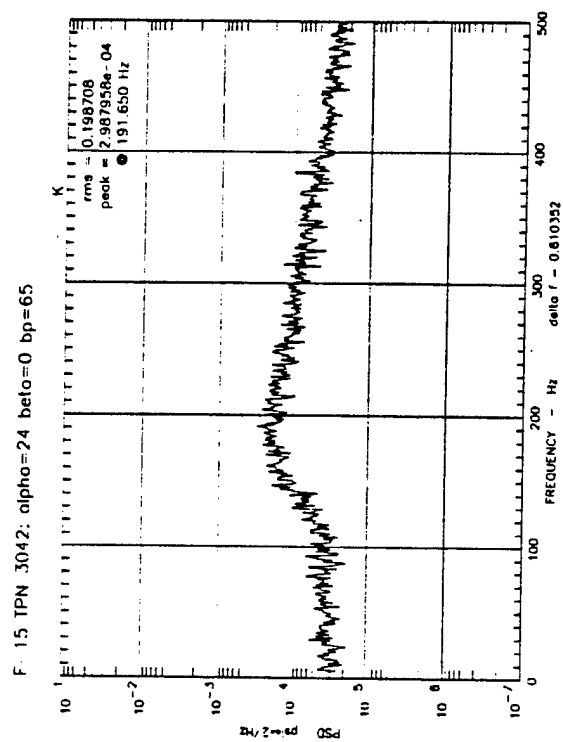
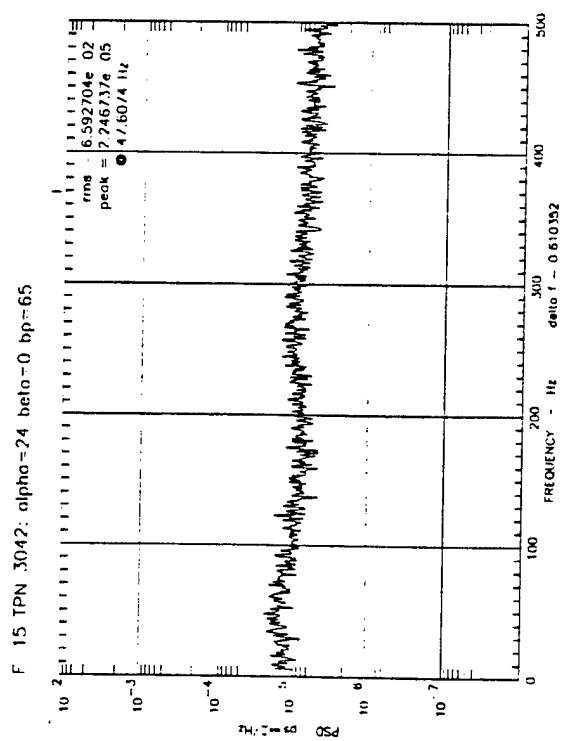
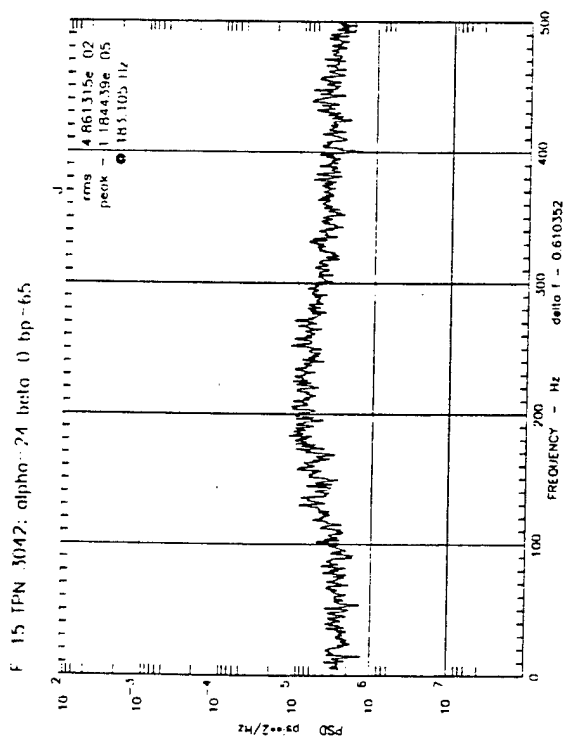


F 15 TPN 3042: alpha=24 beta=0 bp=65

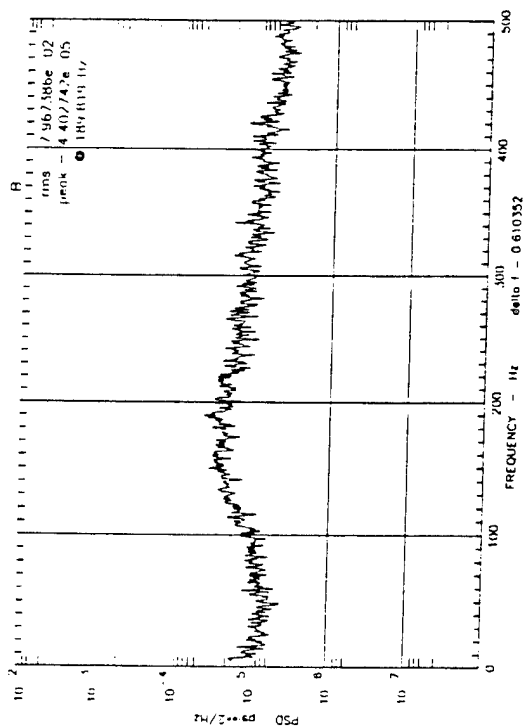


F 15 TPN 3042: alpha=24 beta=0 bp=65

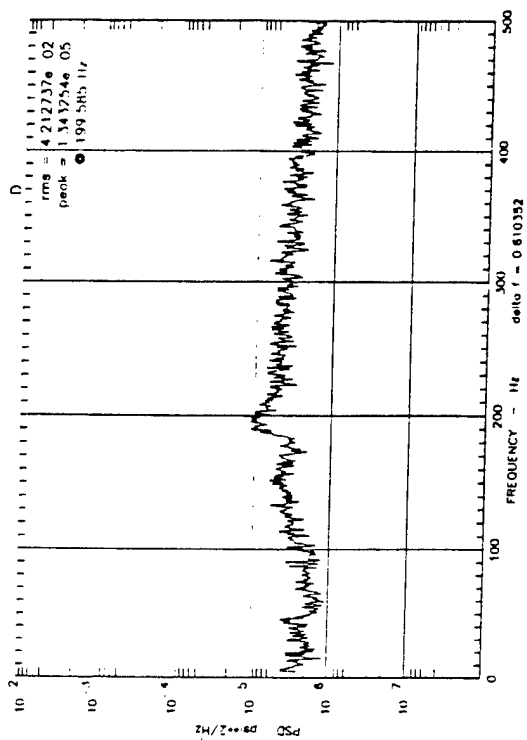




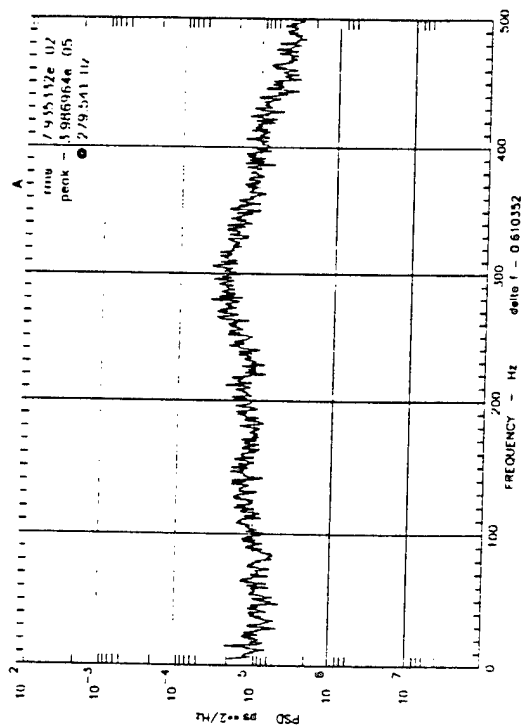
F 15 TPN 2959: alpha=28 beta=0 bp=65



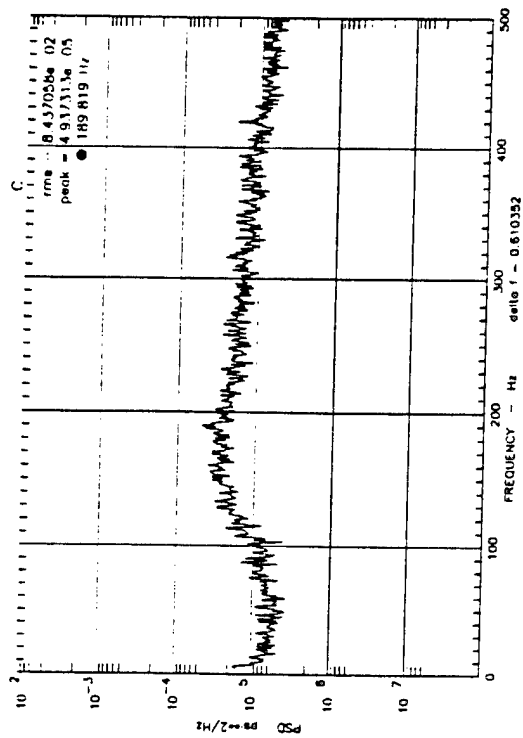
F 15 TPN 2959: alpha=28 beta=0 bp=65



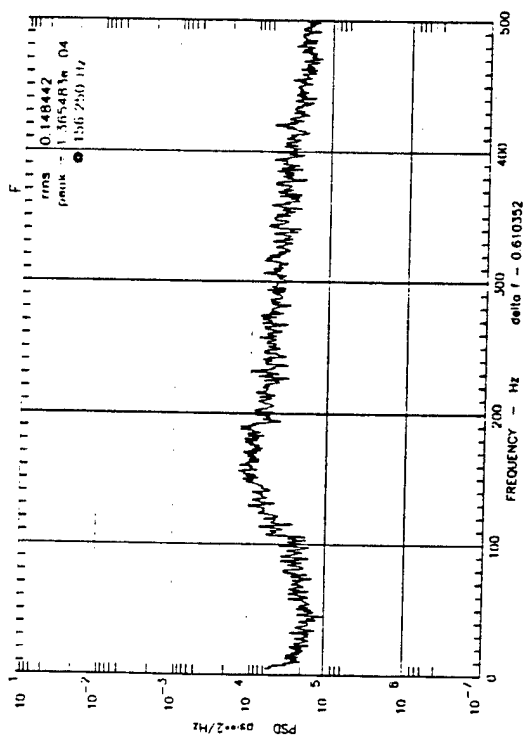
F 15 TPN 2959: alpha=28 beta=0 bp=65



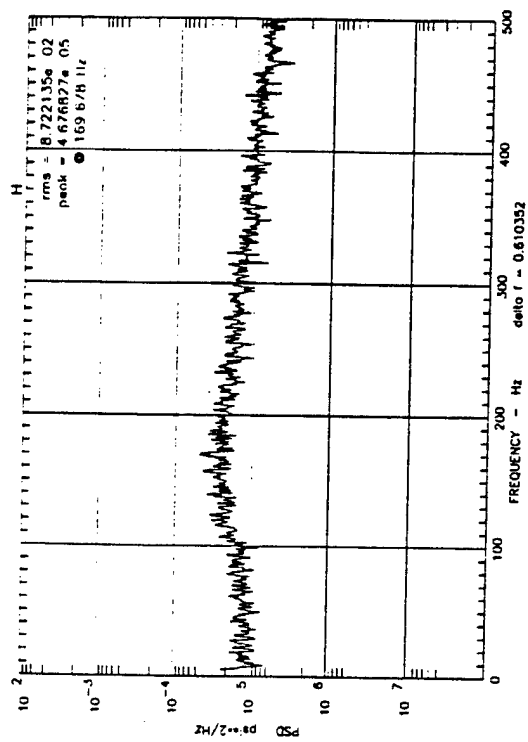
F 15 TPN 2959: alpha=28 beta=0 bp=65



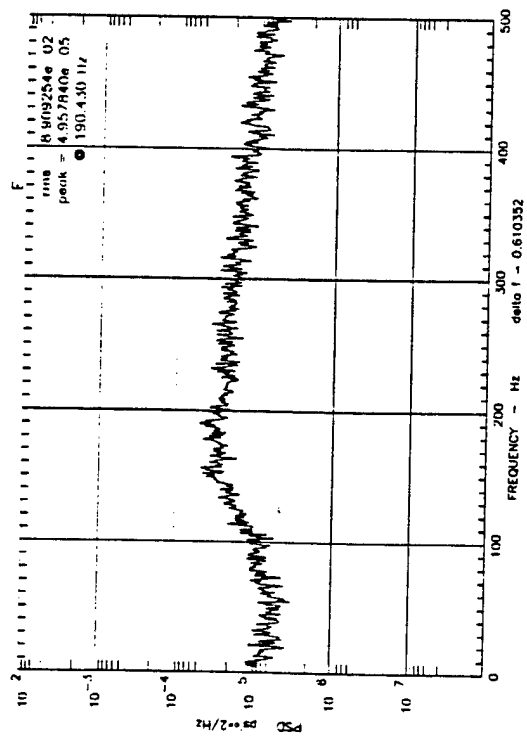
F 15 TPN 2959: alpha=28 beta=0 bp=65



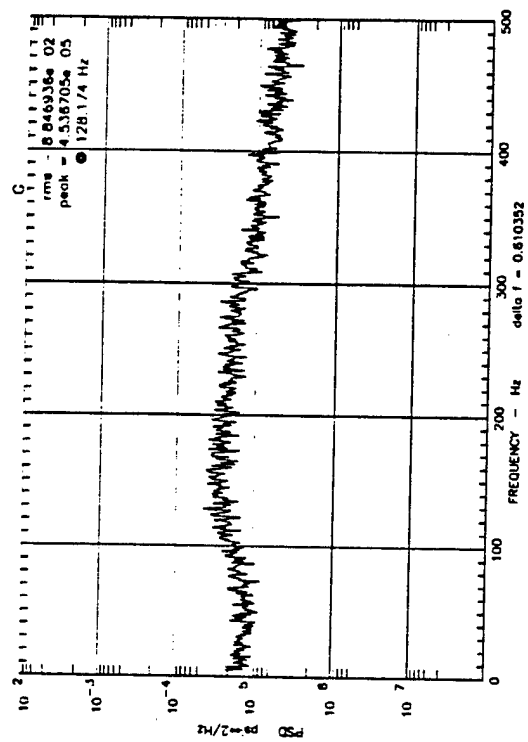
F 15 TPN 2959: alpha=28 beta=0 bp=65



F 15 TPN 2959: alpha=28 beta=0 bp=65

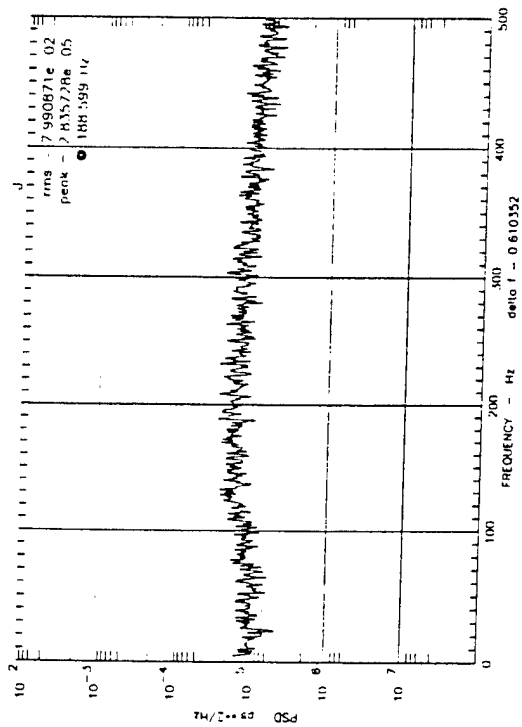


F 15 TPN 2959: alpha=28 beta=0 bp=65

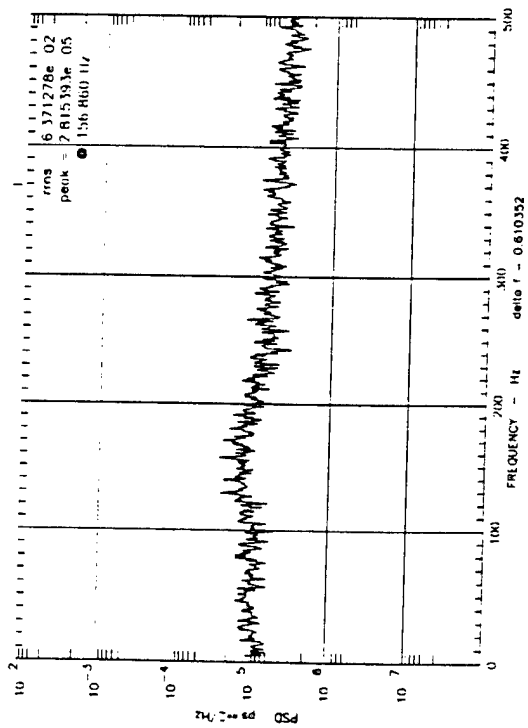




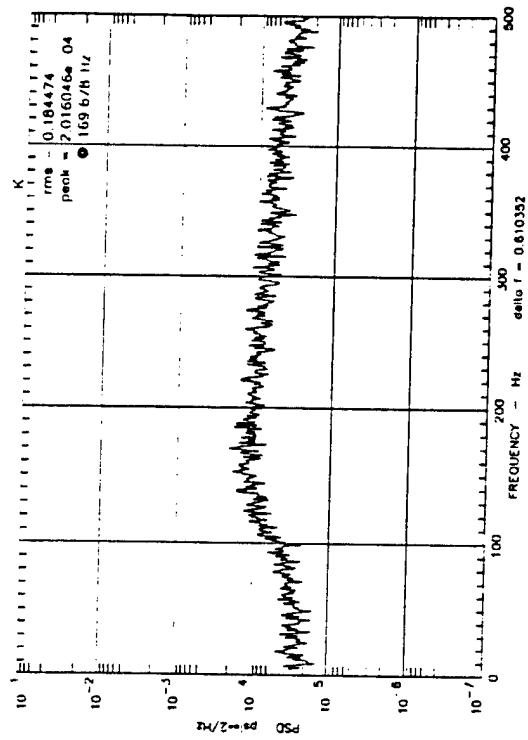
F 15 TPN 2959; alpha=28 beta=0 bp=65



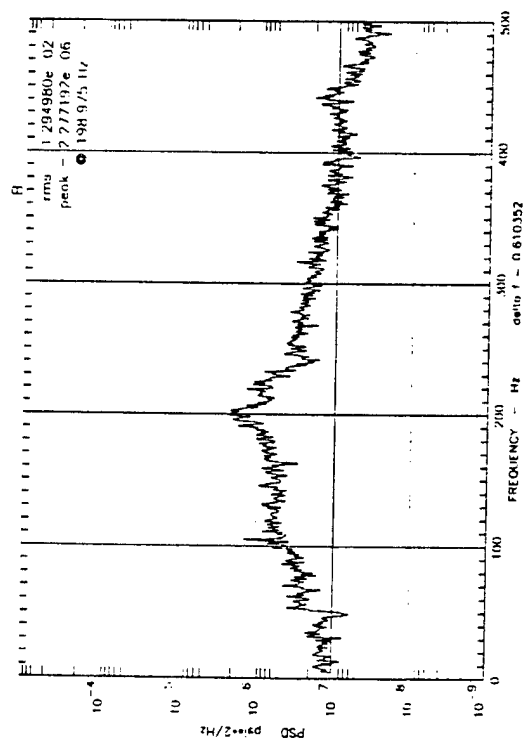
F 15 TPN 2959; alpha=28 beta=0 bp=65



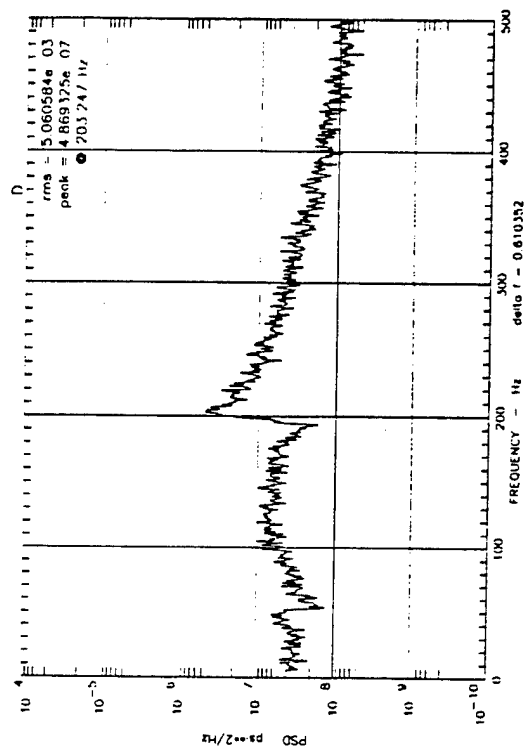
F 15 TPN 2959; alpha=28 beta=0 bp=65



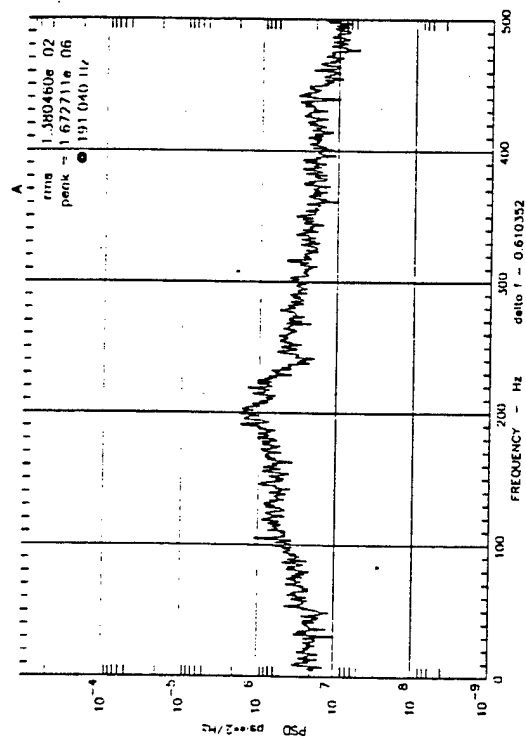
F 15 TPN 3032: alpha=16 beta= 4 bp=65



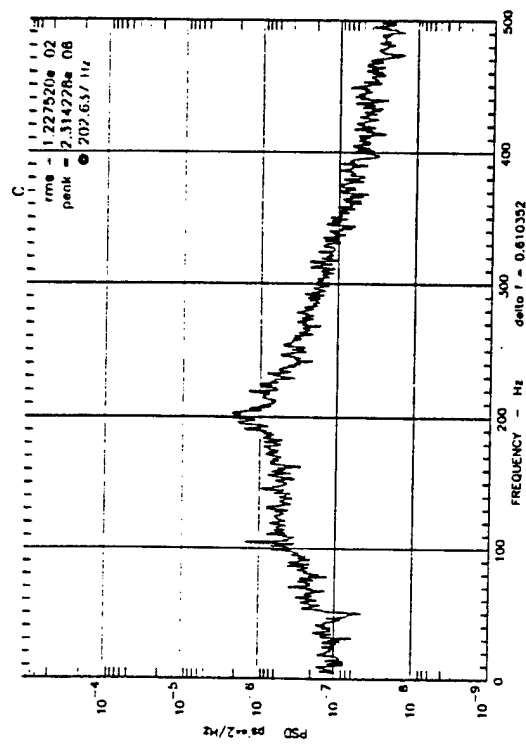
F 15 TPN 3032: alpha=16 beta= 4 bp=65



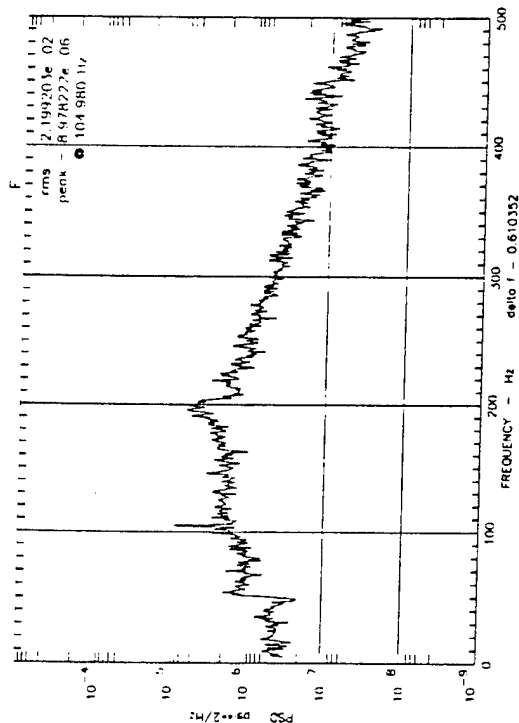
F 15 TPN 3032: alpha=16 beta= 4 bp=65



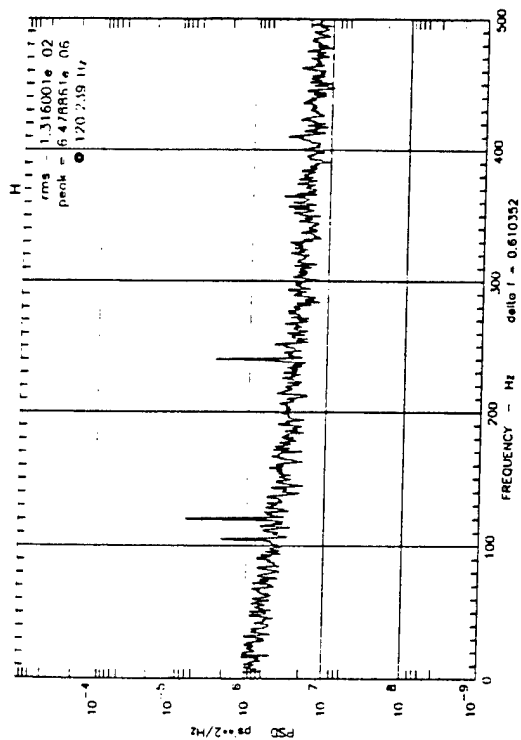
F 15 TPN 3032: alpha=16 beta= 4 bp=65



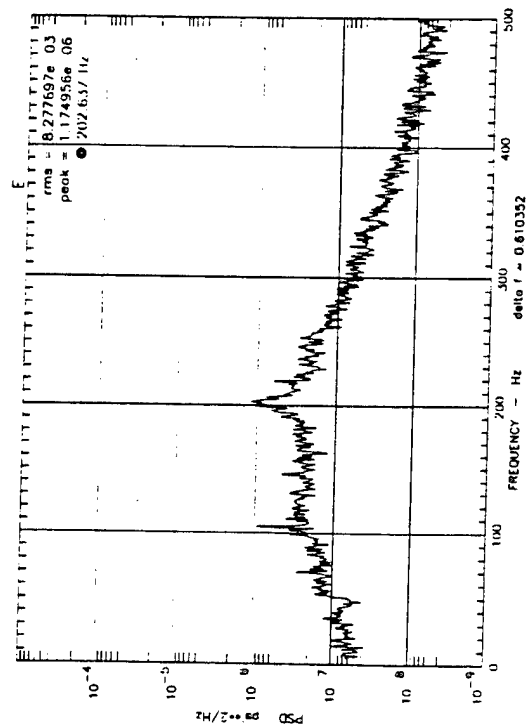
F 15 TPN 3032: alpha=16 beta= 4 bp=65



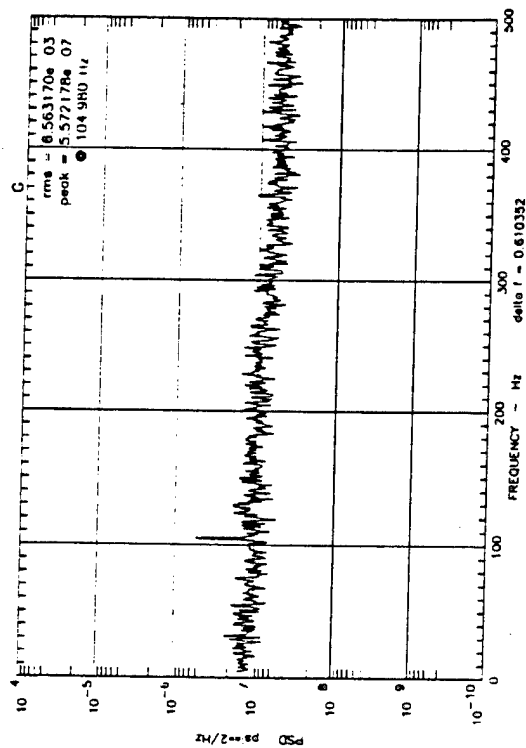
F 15 TPN 3032: alpha=16 beta= 4 bp=65

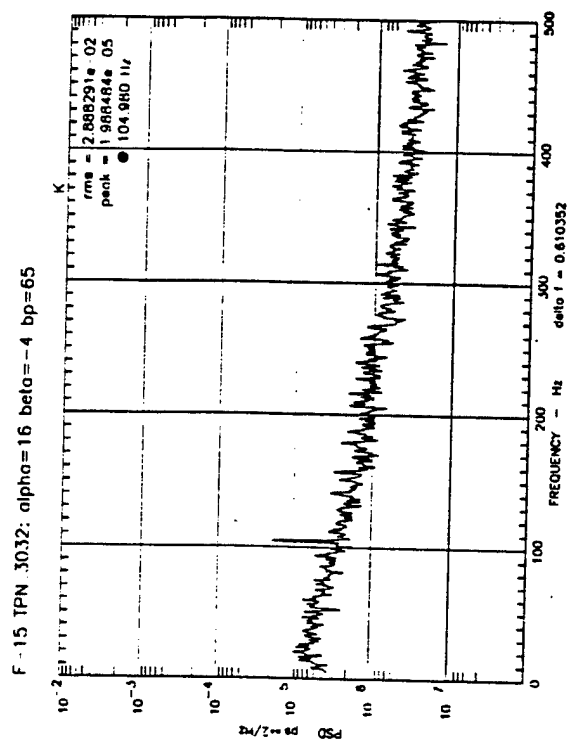
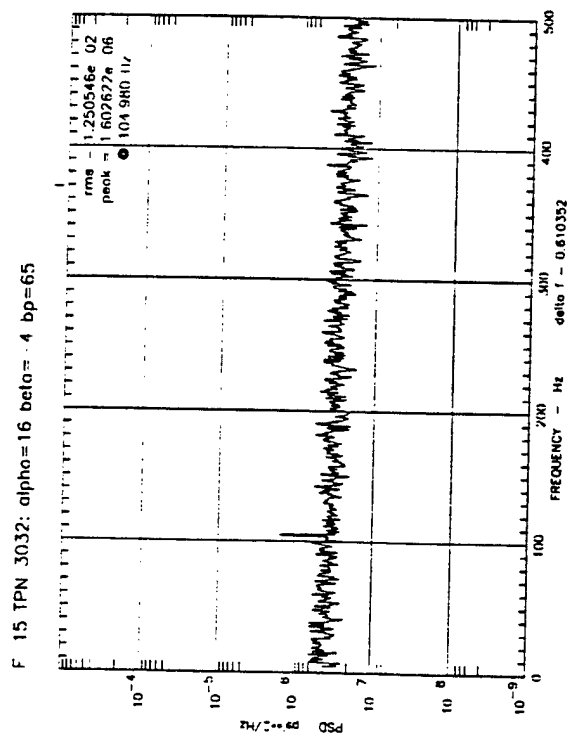
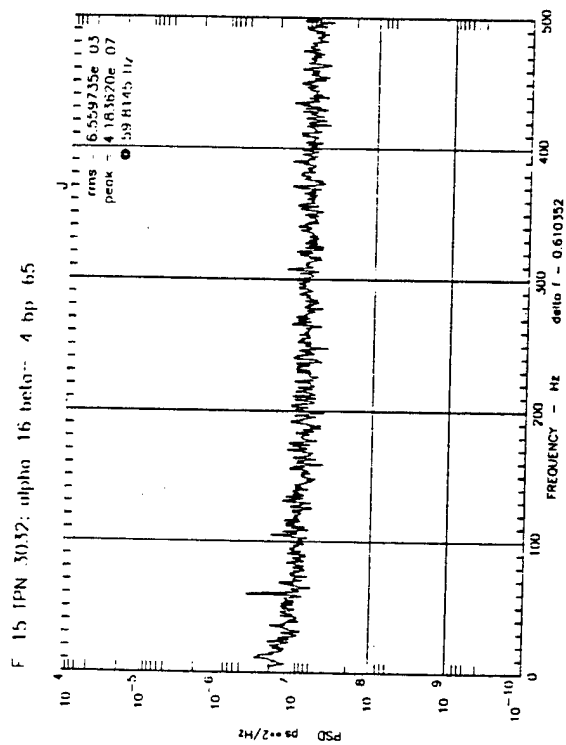


F 15 TPN 3032: alpha=16 beta= 4 bp=65

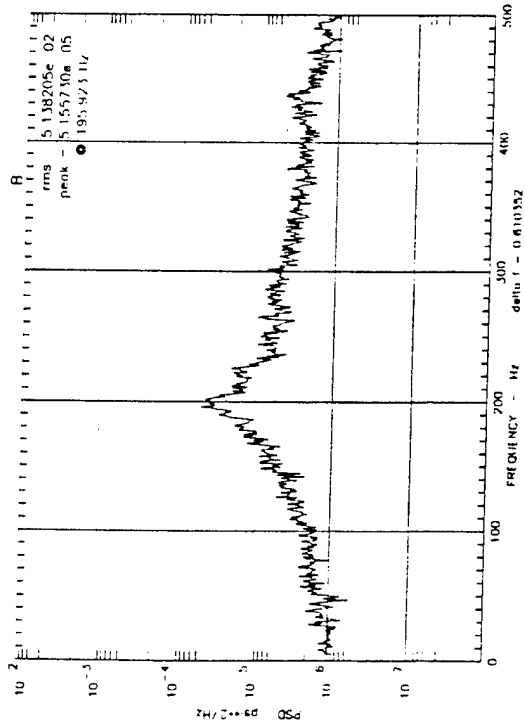


F 15 TPN 3032: alpha=16 beta= 4 bp=65

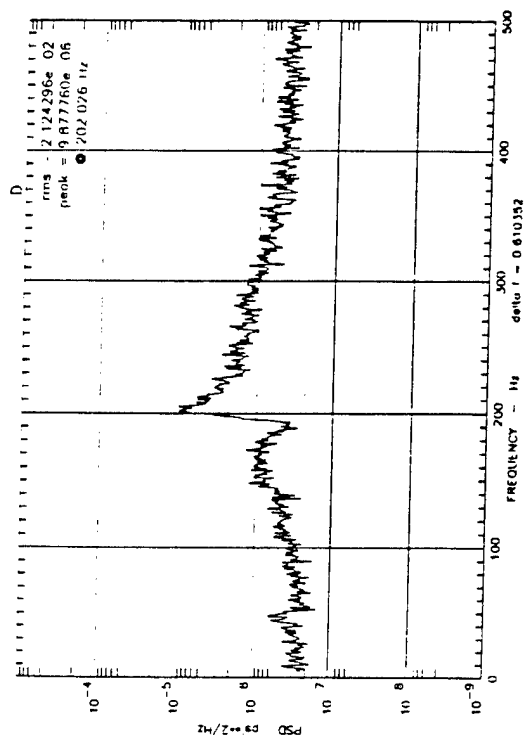




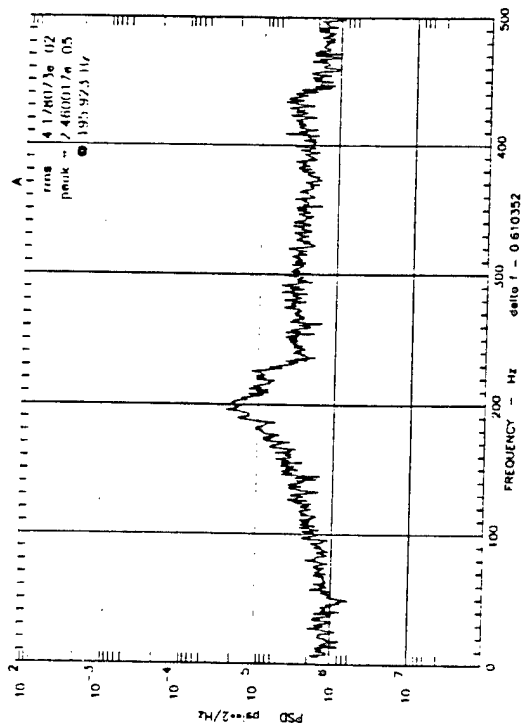
F 15 TPN 3034: alpha=20 beta=-4 bp=65



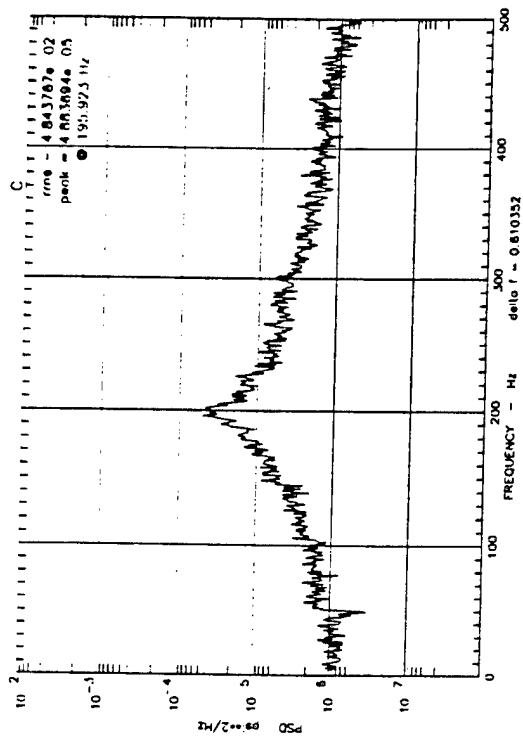
F 15 TPN 3034: alpha=20 beta=4 bp=65



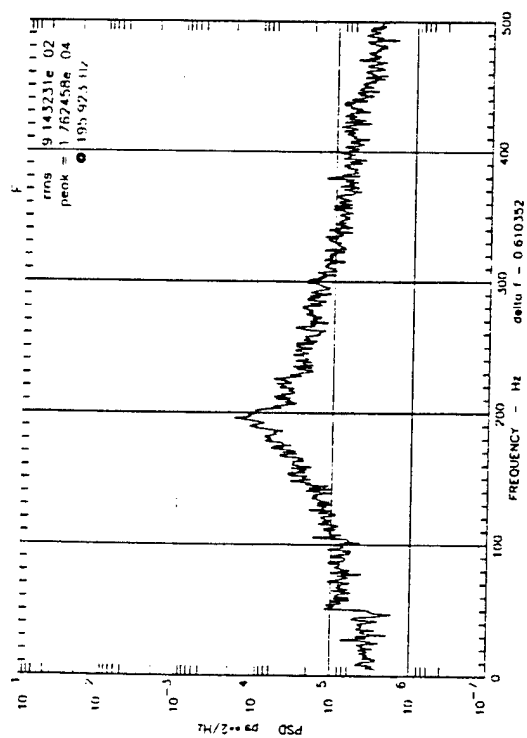
F 15 TPN 3034: alpha=20 beta=-4 bp=65



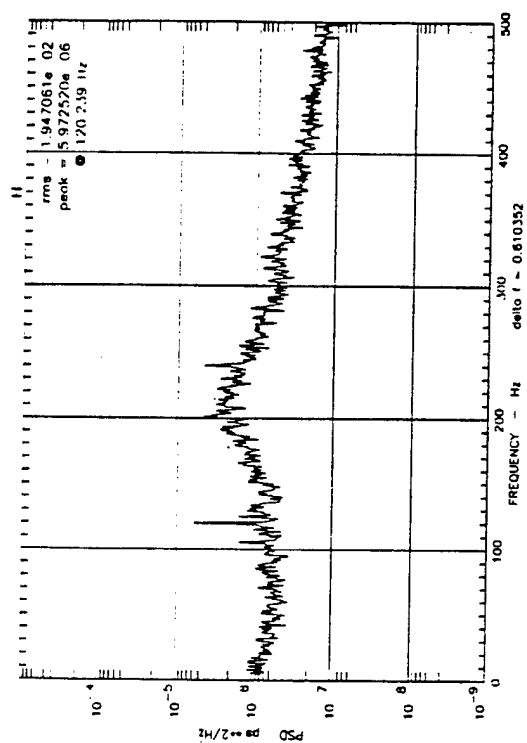
F 15 TPN 3034: alpha=20 beta=4 bp=65



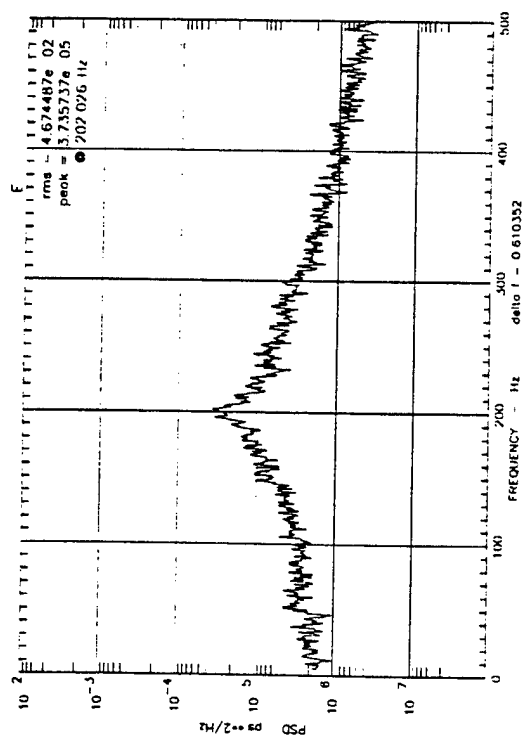
F 15 TPN 3034: alpha-20 beta= 4 bp-65



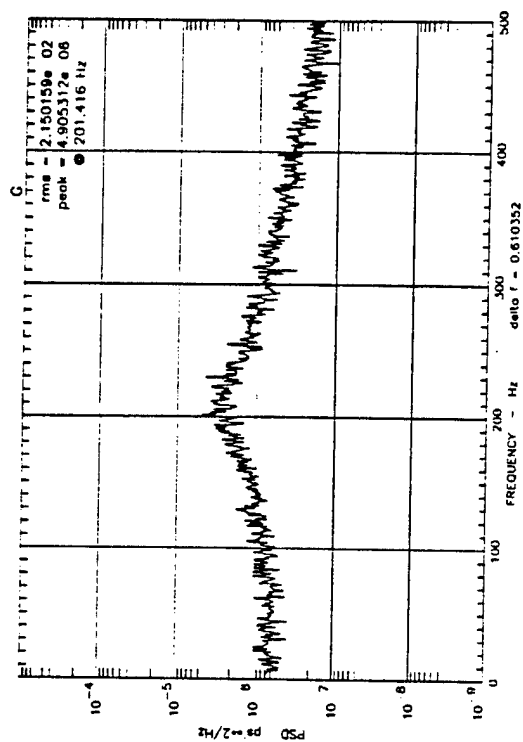
F 15 TPN 3034: alpha-20 beta= 4 bp-65



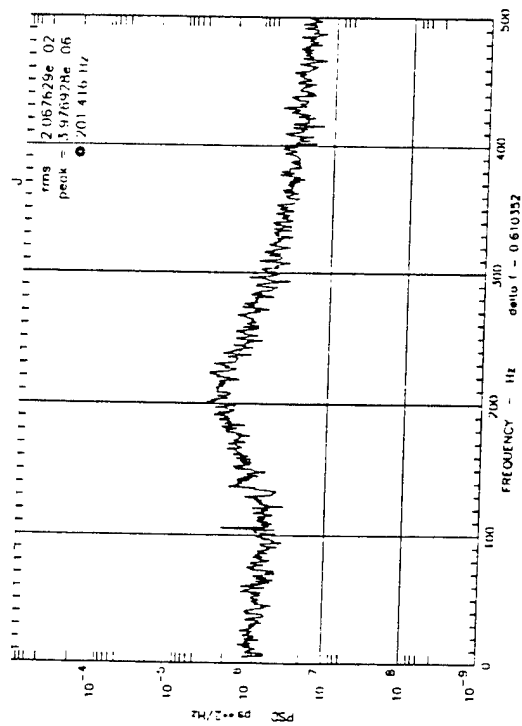
F 15 TPN 3034: alpha-20 beta= 4 bp-65



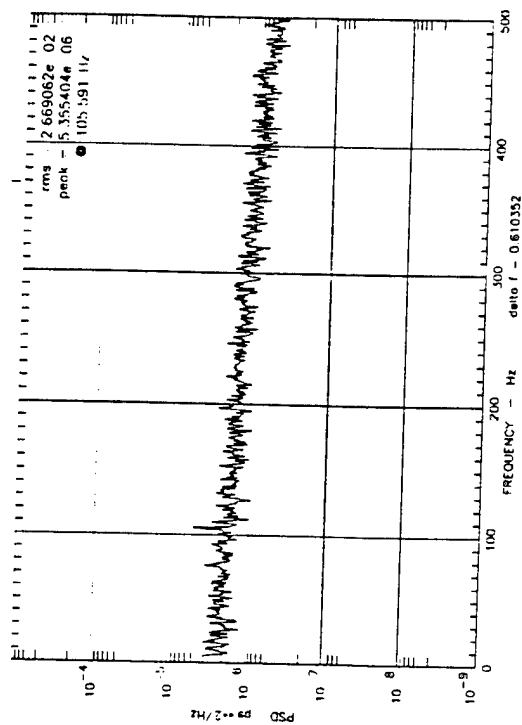
F 15 TPN 3034: alpha-20 beta= 4 bp-65



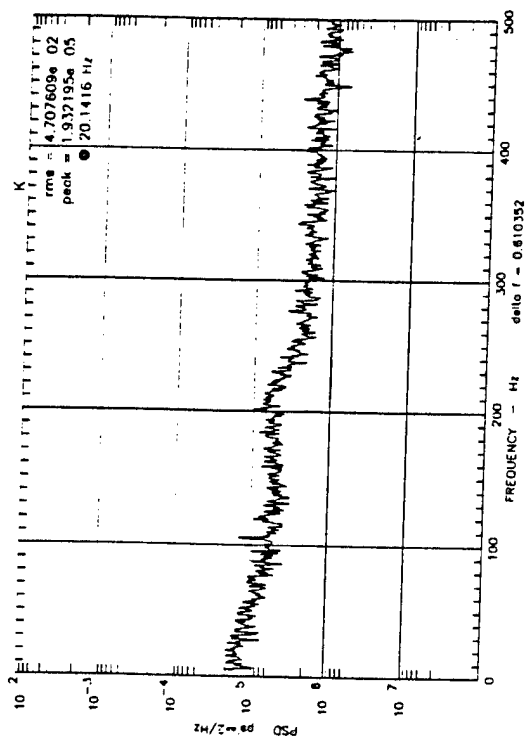
F 15 TPN 3034: alpha=20 beta= 4 bp=65



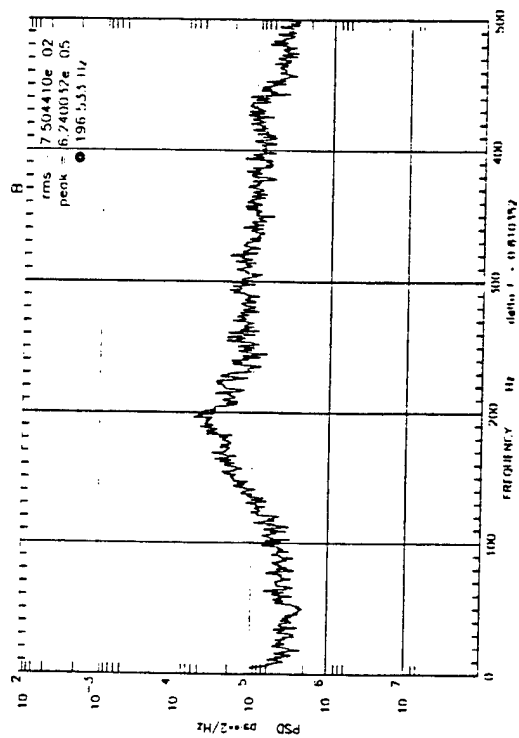
F 15 TPN 3034: alpha=20 beta= 4 bp=65



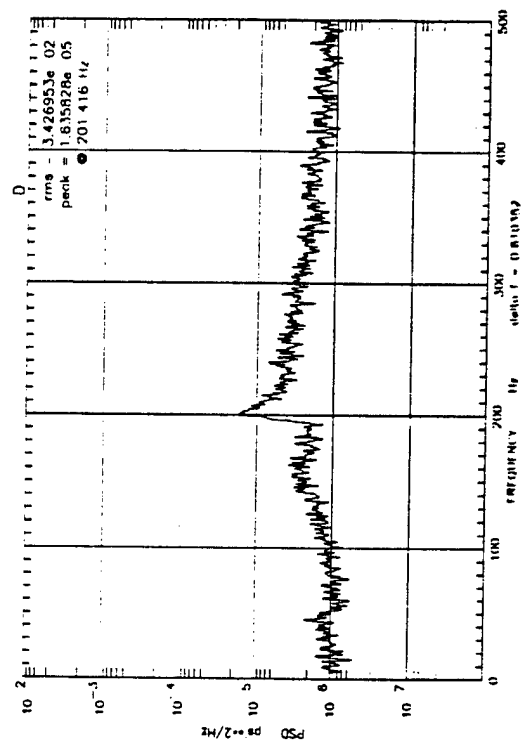
F 15 TPN 3034: alpha=20 beta= 4 bp=65



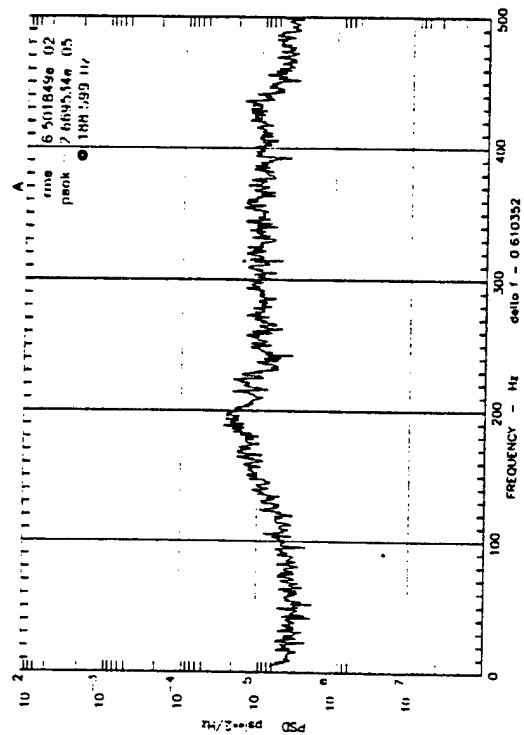
F 15 TPN 3036: alpha=24 beta= 4 bp=65



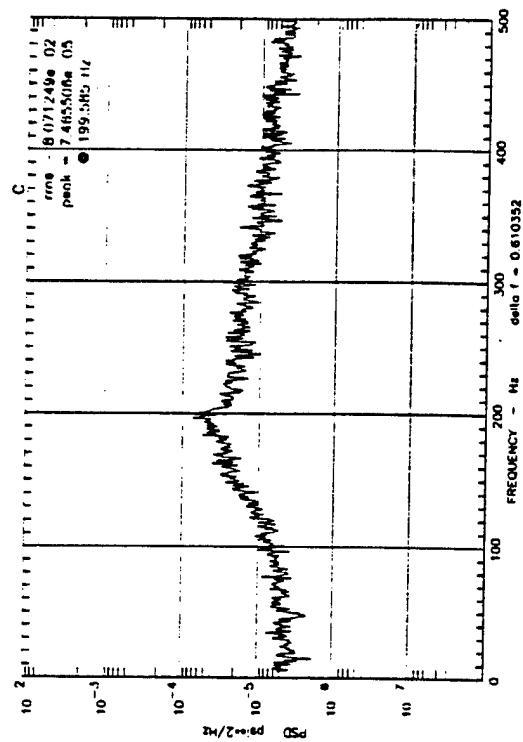
F 15 TPN 3036: alpha=24 beta=-4 bp=65



F 15 TPN 3036: alpha=24 beta= 4 bp=65

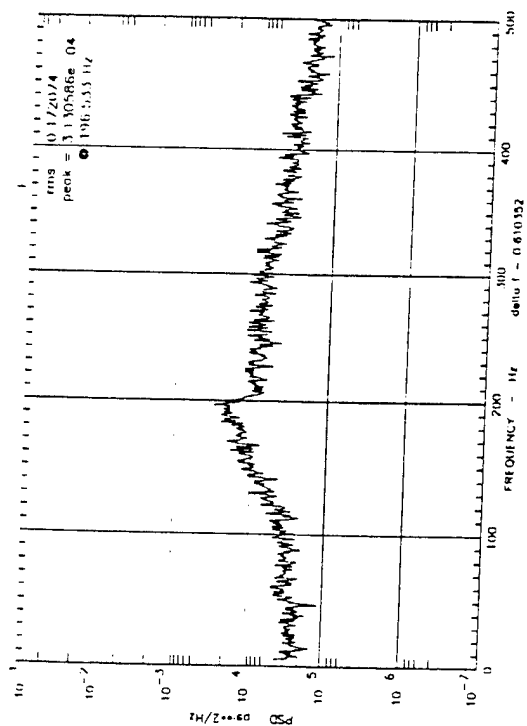


F 15 TPN 3036: alpha=24 beta=-4 bp=65

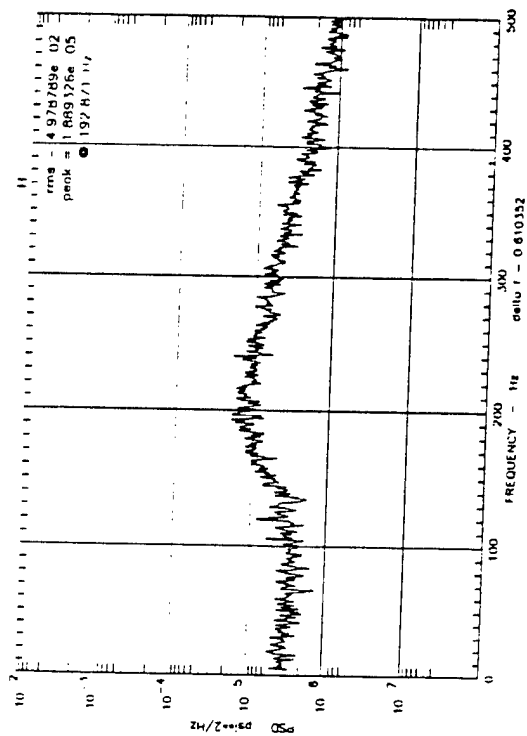




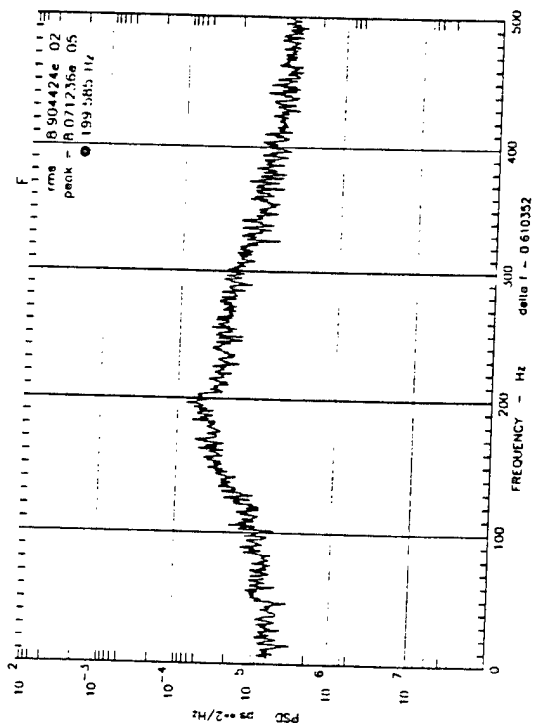
F 15 TPN 3036: alpha=24 beta= 4 bp=6.5



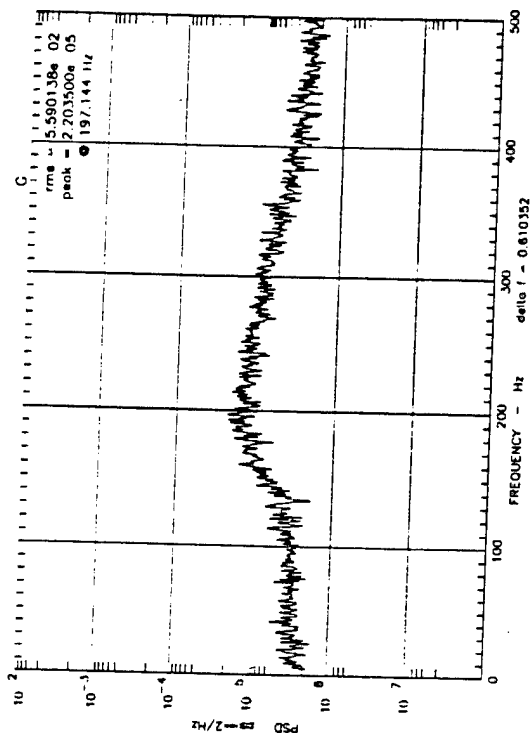
F 15 TPN 3036: alpha=24 beta= 4 bp=6.5



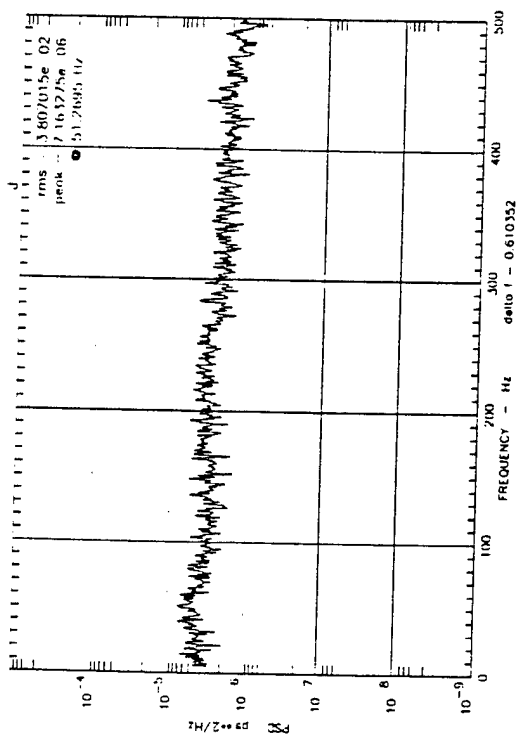
F 15 TPN 3036: alpha=24 beta= 4 bp=6.5



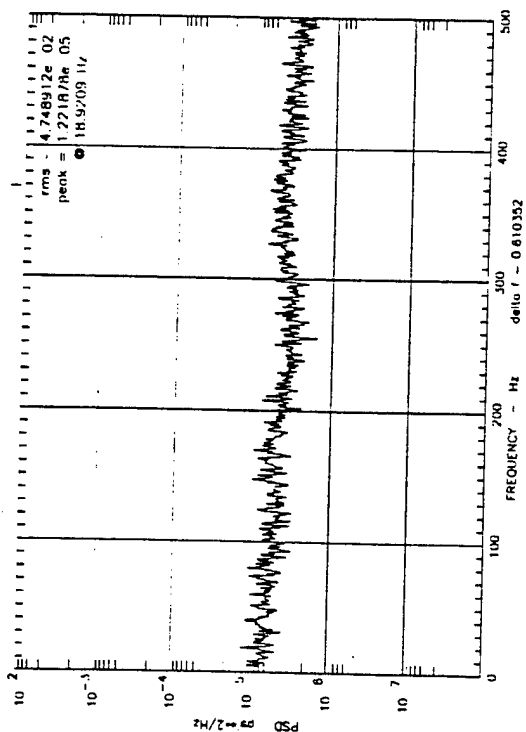
F 15 TPN 3036: alpha=24 beta= 4 bp=6.5



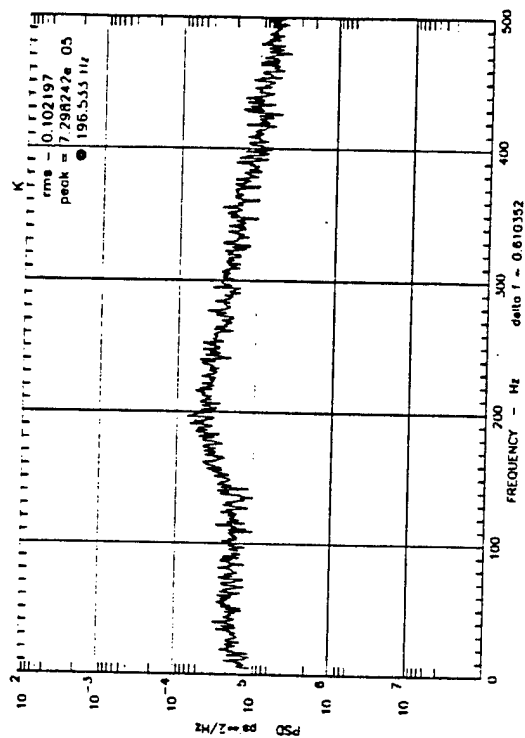
F 15 TPN 3036: alpha=24 beta= 4 bp=65



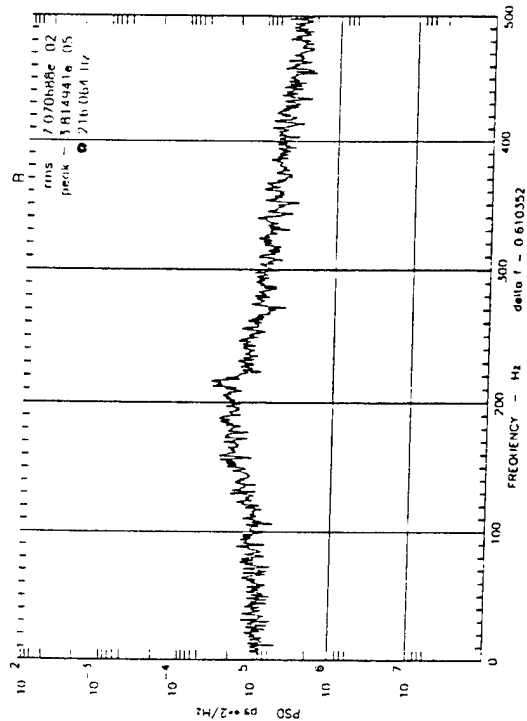
F 15 TPN 3036: alpha=24 beta= 4 bp=65



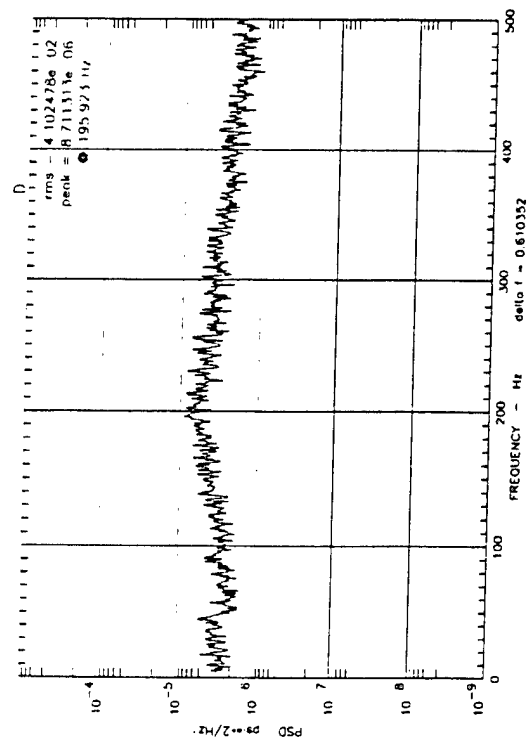
F 15 TPN 3036: alpha=24 beta=-4 bp=65



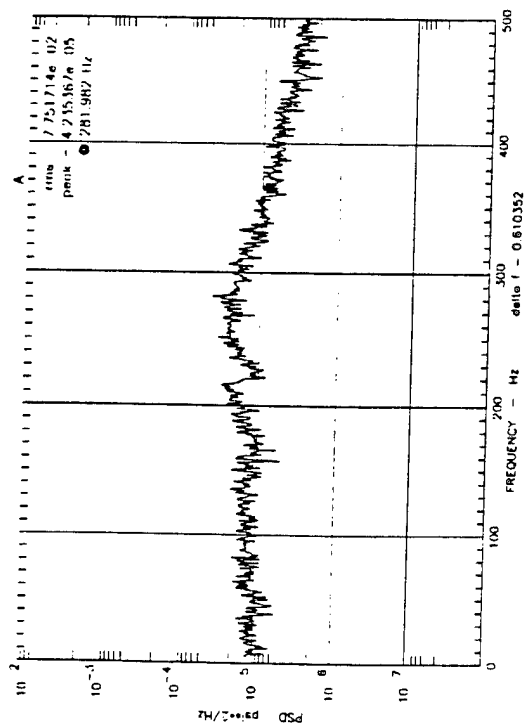
F 15 TPN 2960:  $\alpha=28$   $\beta=4$  bp=65



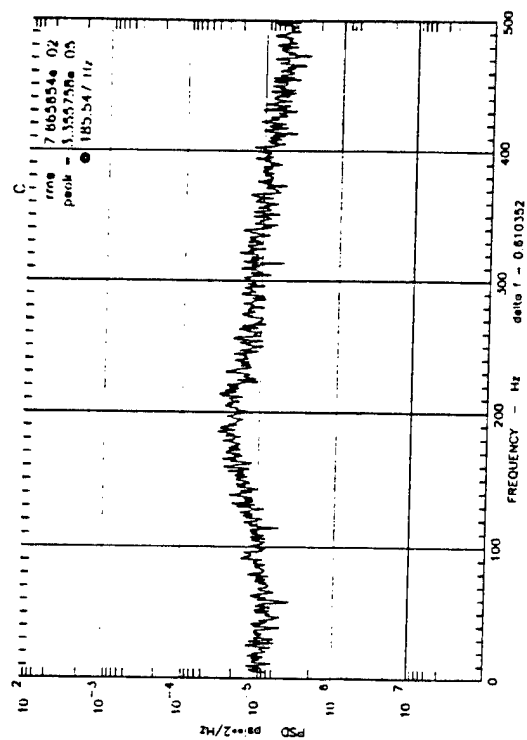
F 15 TPN 2960:  $\alpha=28$   $\beta=4$  bp=65



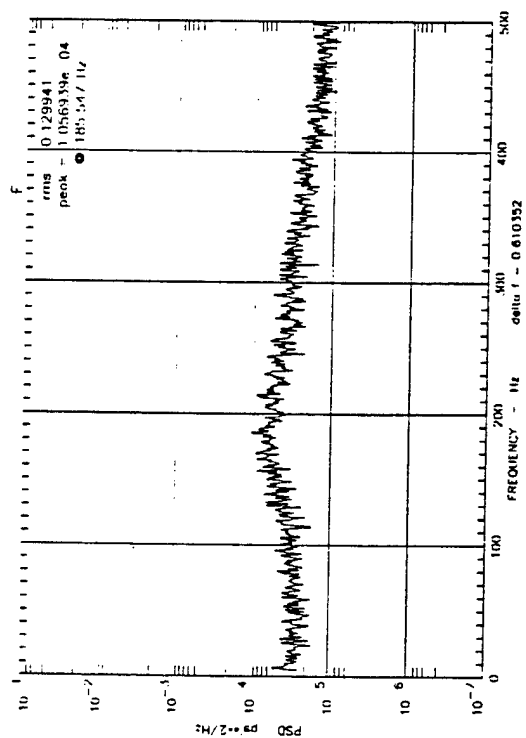
F 15 TPN 2960:  $\alpha=28$   $\beta=4$  bp=65



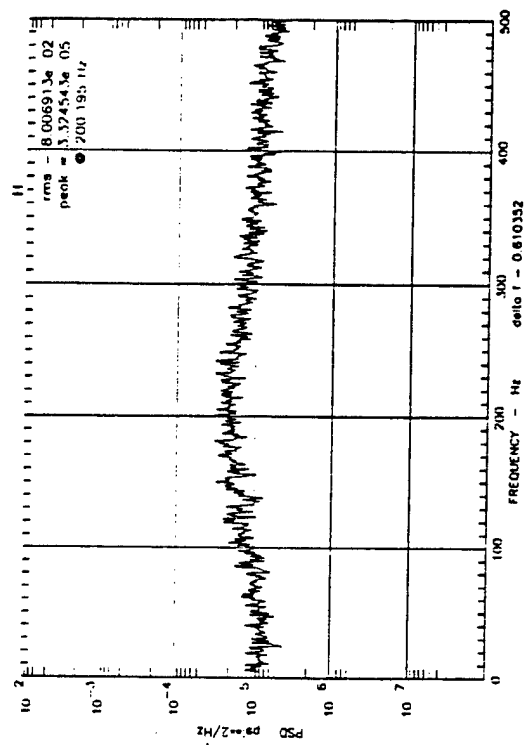
F 15 TPN 2960:  $\alpha=28$   $\beta=4$  bp=65



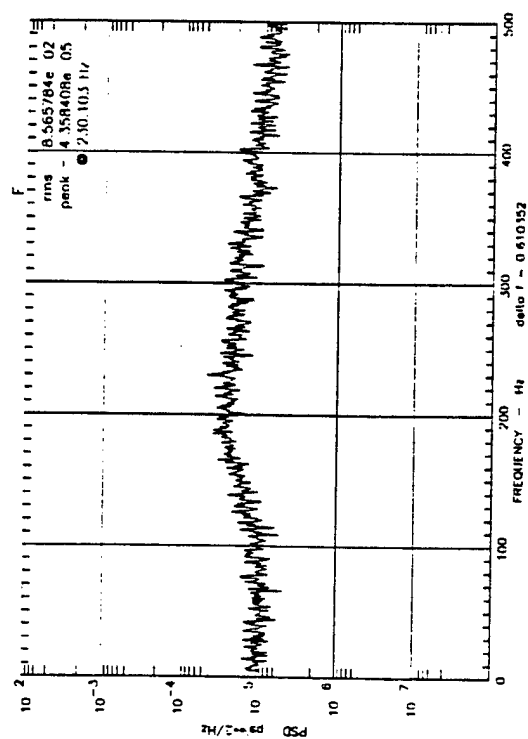
F 15 TPN 2960: alpha-28 beta- 4 bp-65



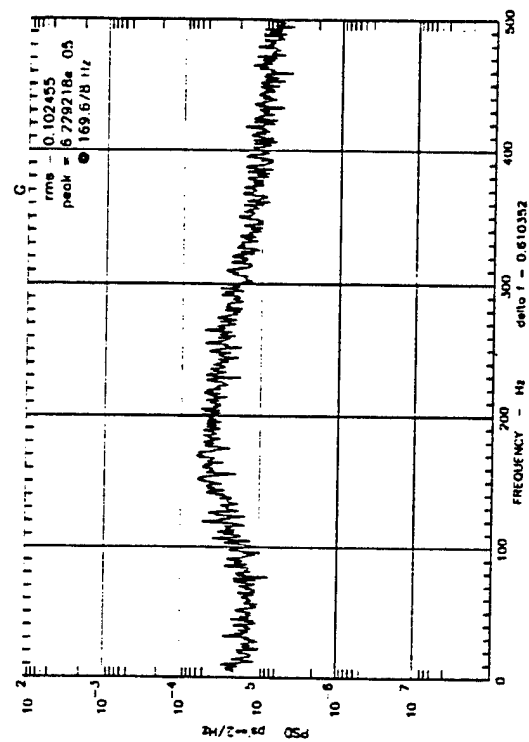
F 15 TPN 2960: alpha-28 beta- 4 bp-65



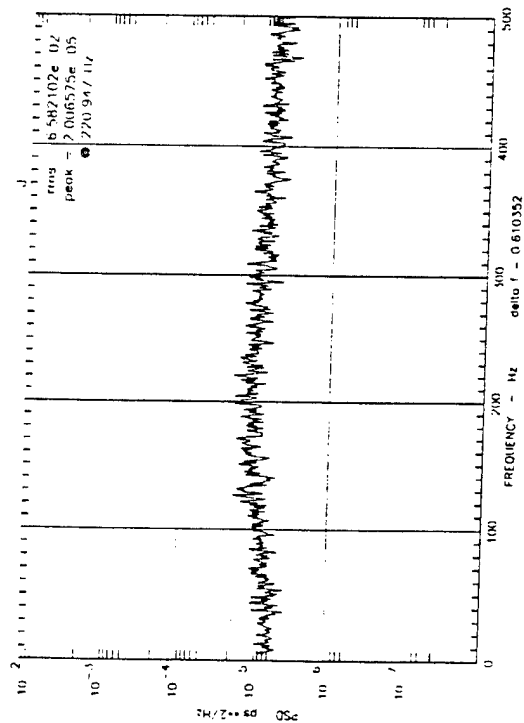
F 15 TPN 2960: alpha-28 beta- 4 bp-65



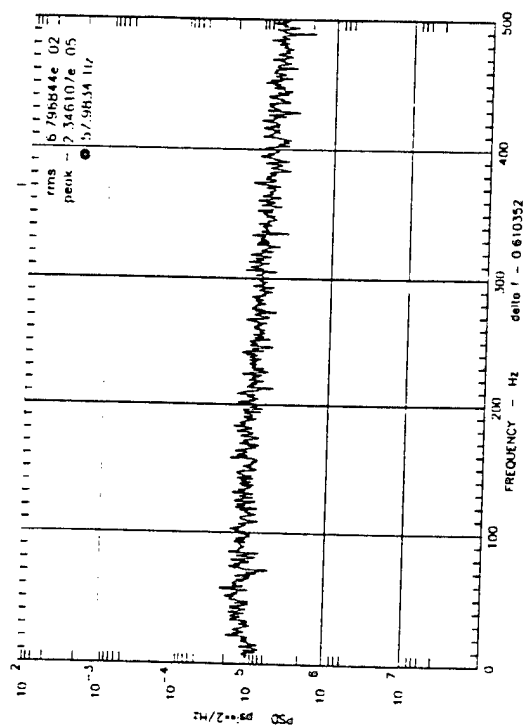
F 15 TPN 2960: alpha-28 beta- 4 bp-65



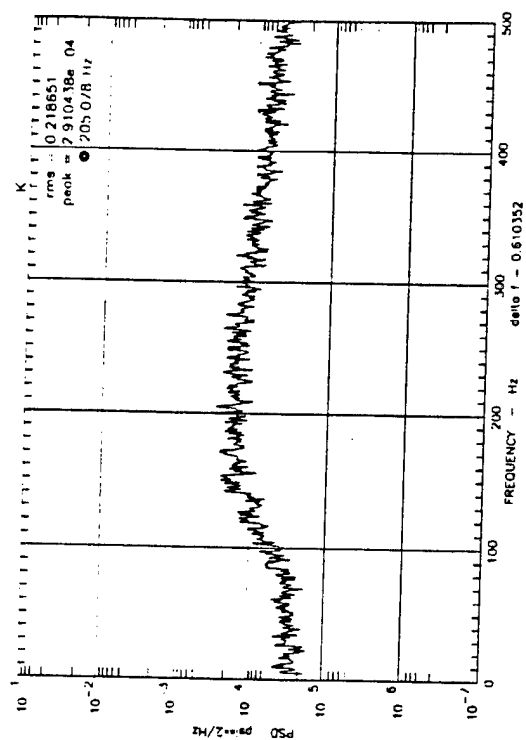
F 15 TPN 2960: alpha-28 beta= 4 bp=65



F 15 TPN 2960: alpha-28 beta= 4 bp=65



F 15 TPN 2960: alpha-28 beta= 4 bp=65

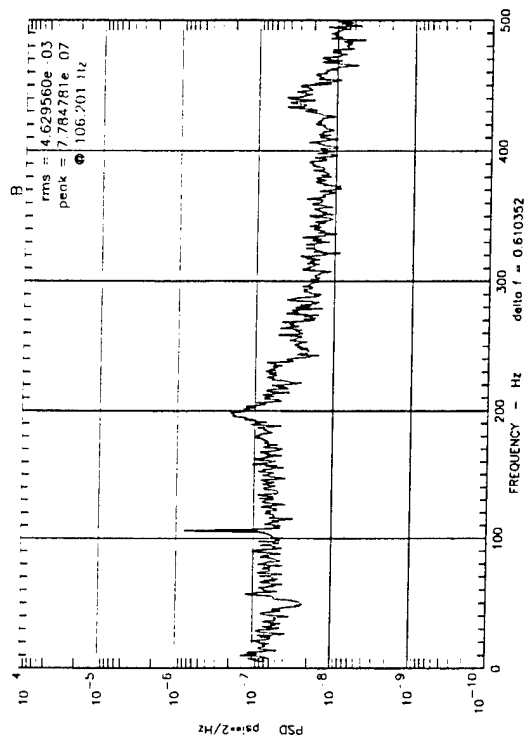


**PRESSURE PSD's**

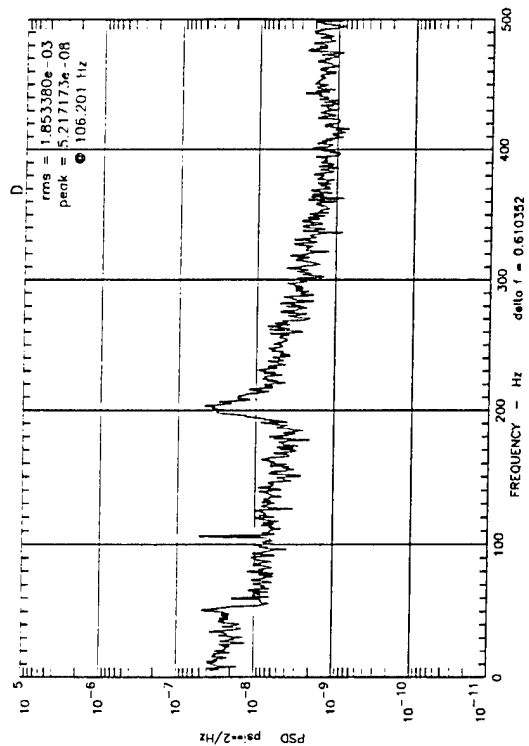
**Q=56 PSF**

**2.1.2.2 PSD GRAPHS( 5- 500 Hz), GBP = 65 PSI, Beta = 0, +4, -4 Deg,  
Alpha = 8...32 Deg**

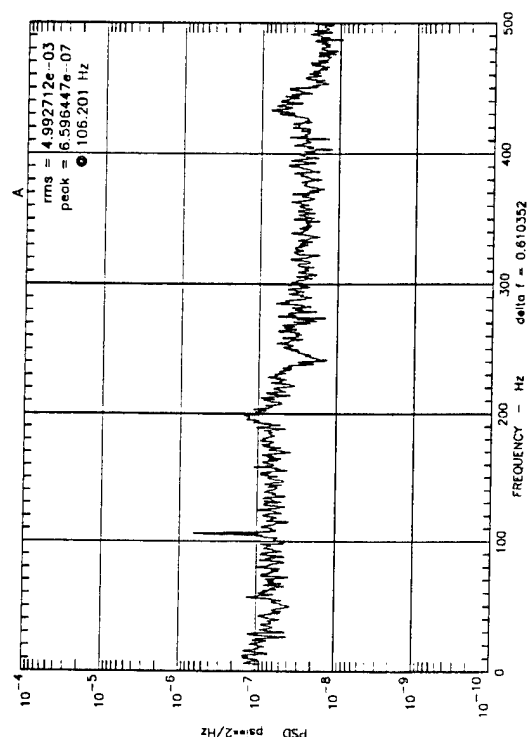
F-15 TPN\_3004: q=56 alpha=16 beta=4 bp=65g



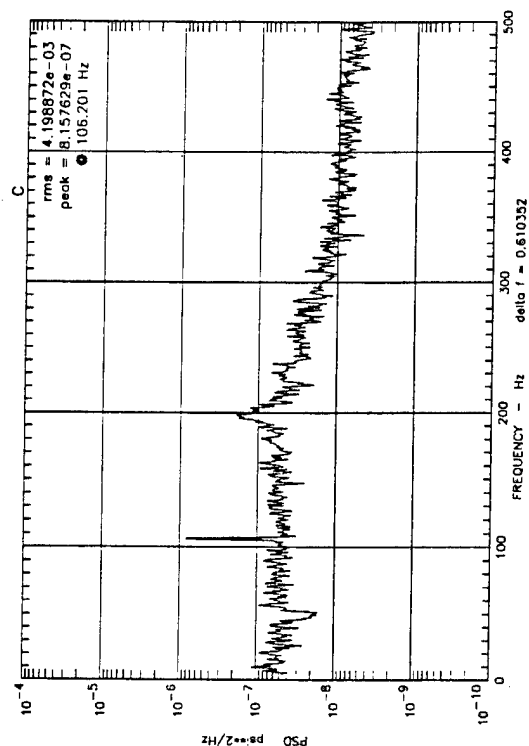
F-15 TPN\_3004: q=56 alpha=16 beta=4 bp=65g



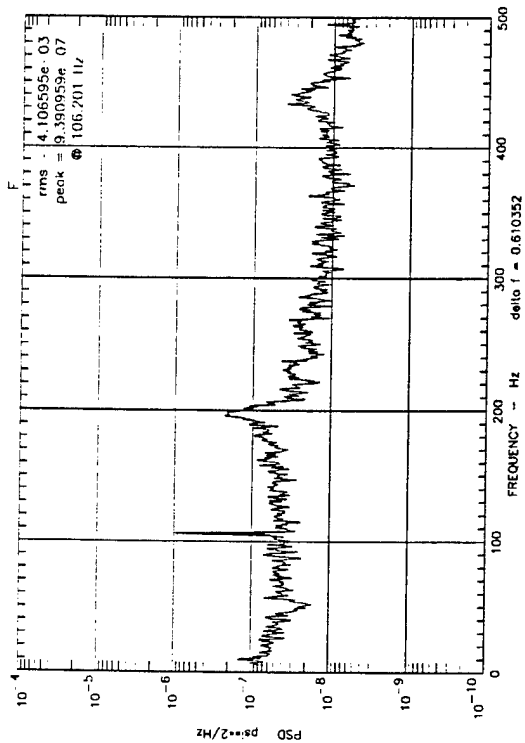
F-15 TPN\_3004: q=56 alpha=16 beta=4 bp=65g



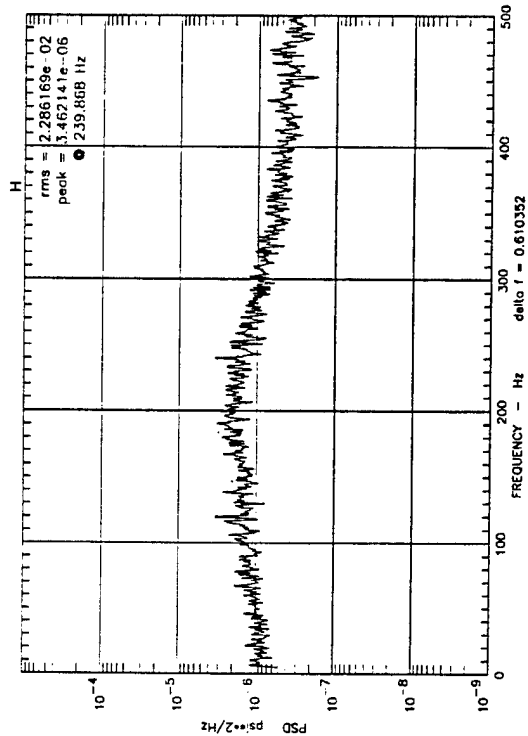
F-15 TPN\_3004: q=56 alpha=16 beta=4 bp=65g



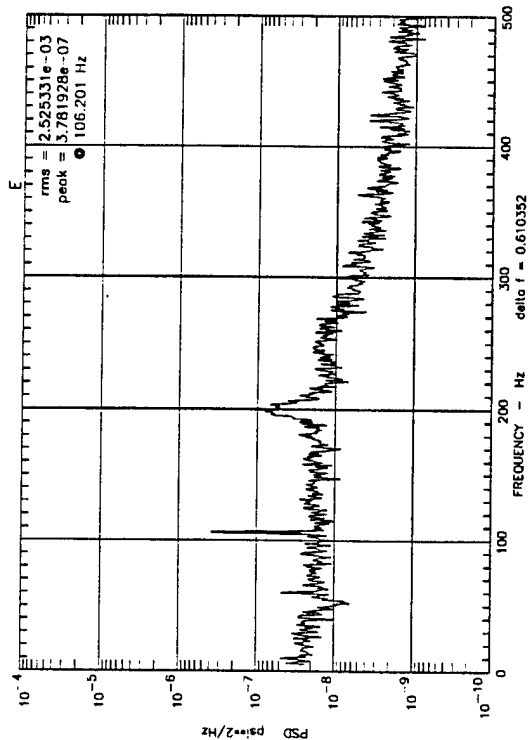
F-15 TPN\_3004: q=56 alpha=16 beta=4 bp=65g



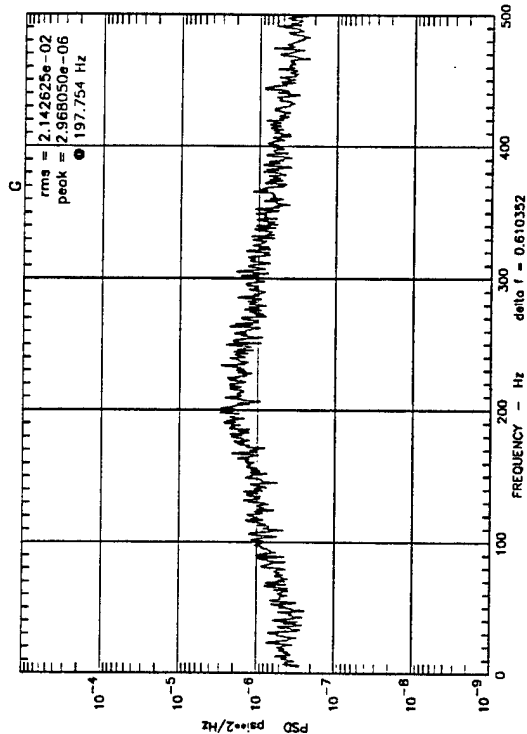
F-15 TPN\_3004: q=56 alpha=16 beta=4 bp=65g



F-15 TPN\_3004: q=56 alpha=16 beta=4 bp=65g

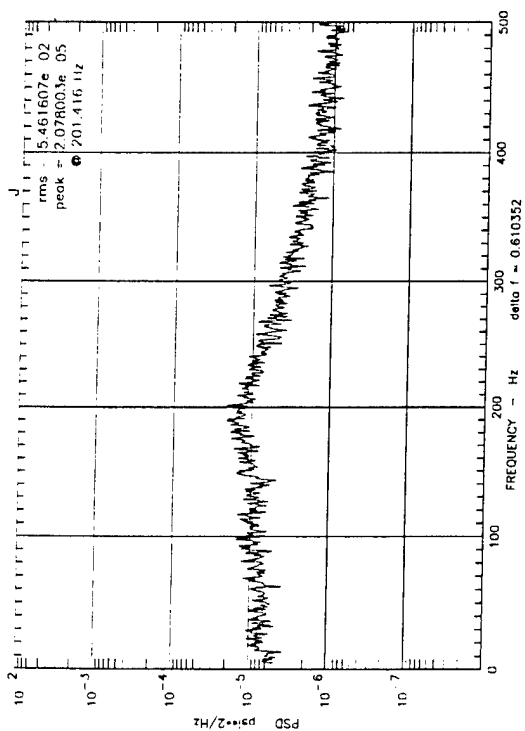


F-15 TPN\_3004: q=56 alpha=16 beta=4 bp=65g

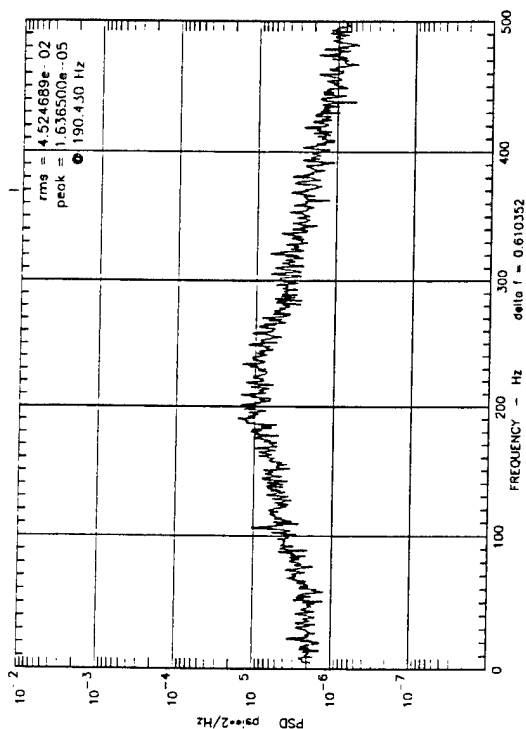




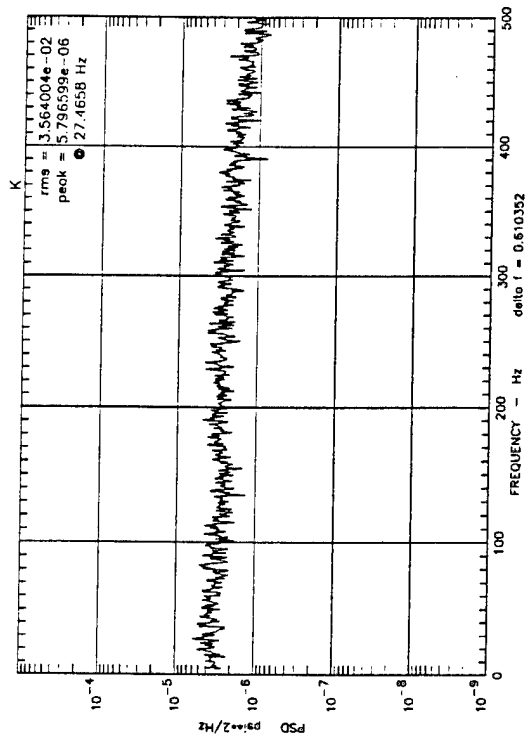
F-15 TPN\_3004: q=56 alpha=16 beta=4 bp=65g



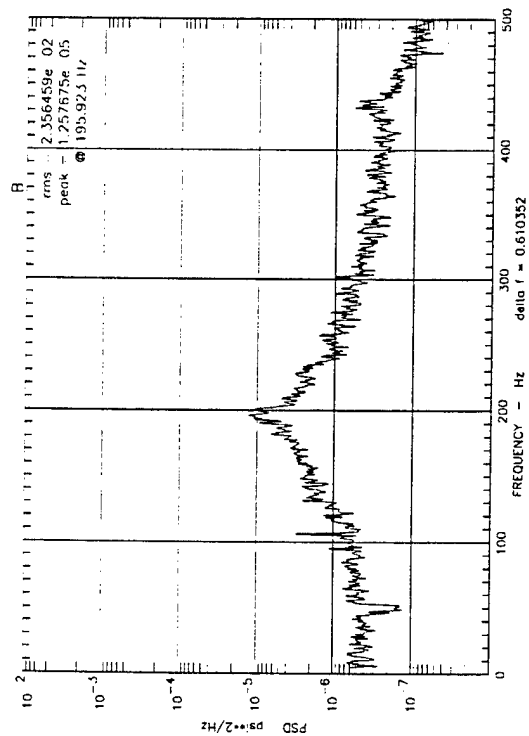
F-15 TPN\_3004: q=56 alpha=16 beta=4 bp=65g



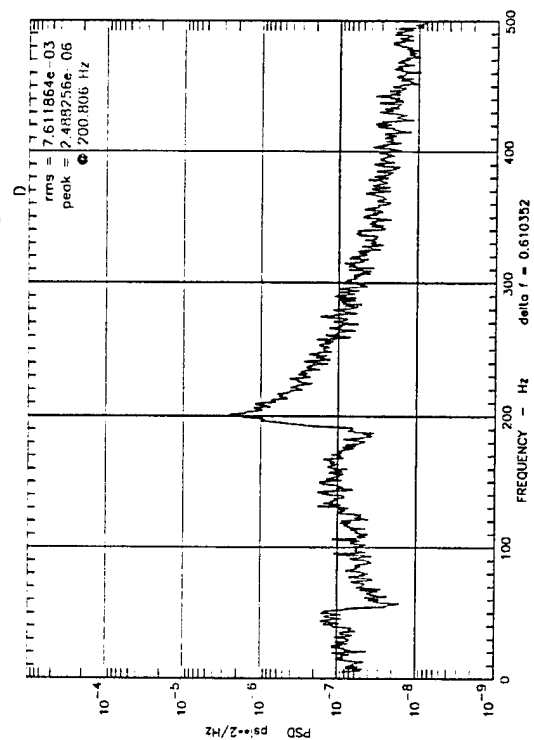
F-15 TPN\_3004: q=56 alpha=16 beta=4 bp=65g



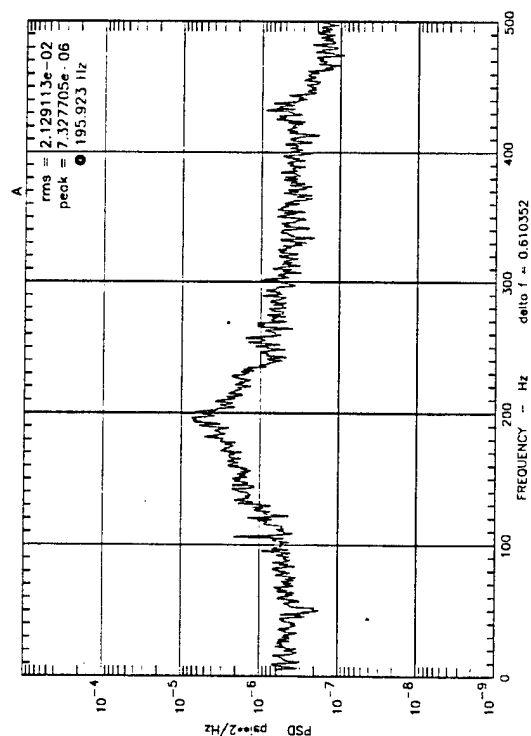
F-15 TPN\_3006: q=56 alpha=20 beta=4 bp=65g



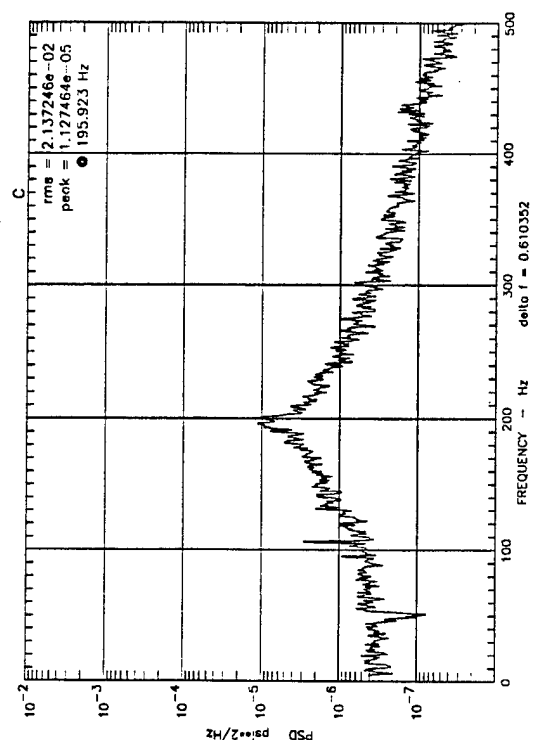
F-15 TPN\_3006: q=56 alpha=20 beta=4 bp=65g



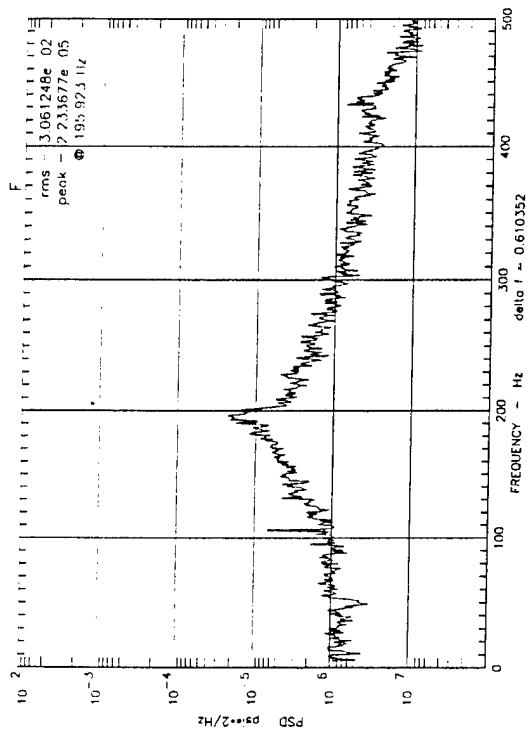
F-15 TPN\_3006: q=56 alpha=20 beta=4 bp=65g



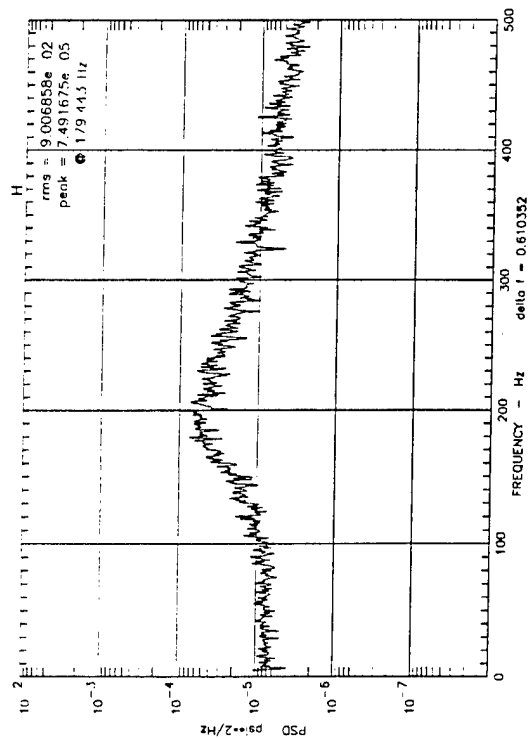
F-15 TPN\_3006: q=56 alpha=20 beta=4 bp=65g



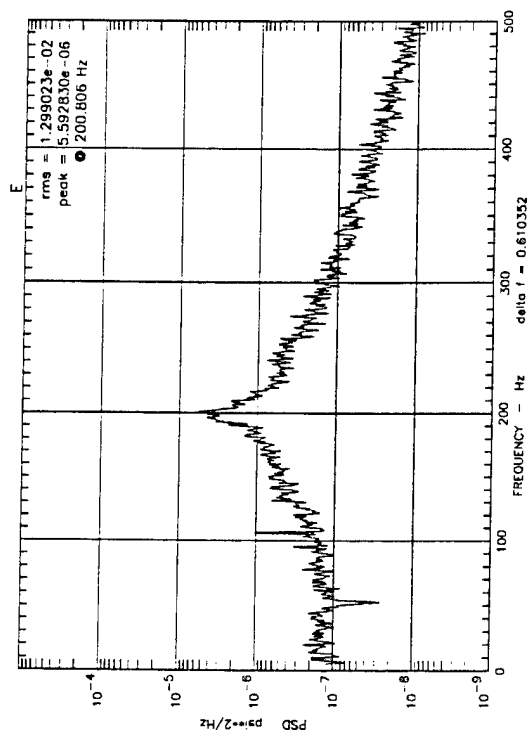
F 15 TPN 3006: q=56 alpha=20 beta=4 bp=65g



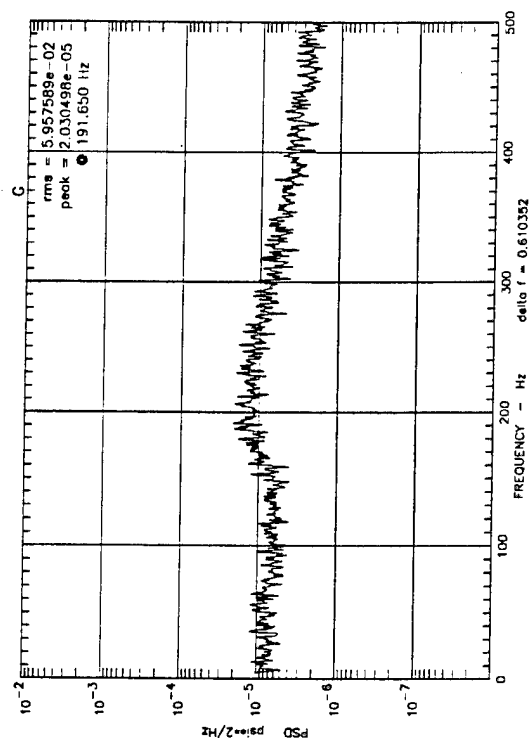
F 15 TPN 3006: q=56 alpha=20 beta=4 bp=65g

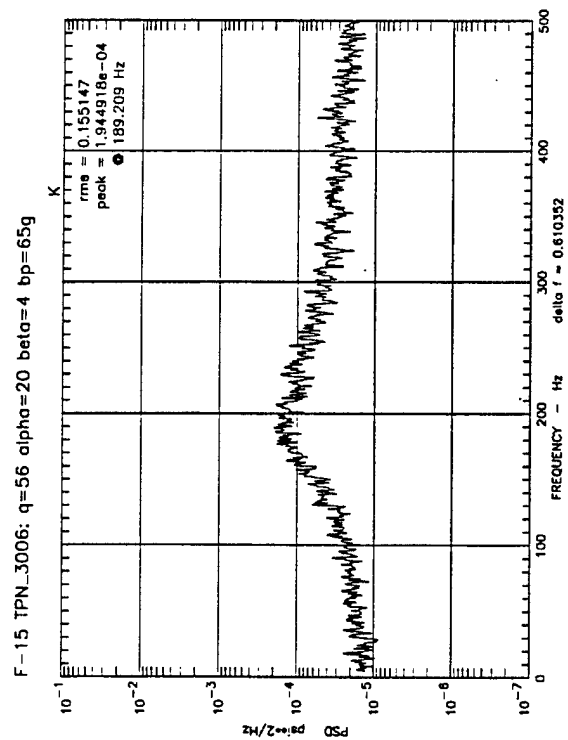
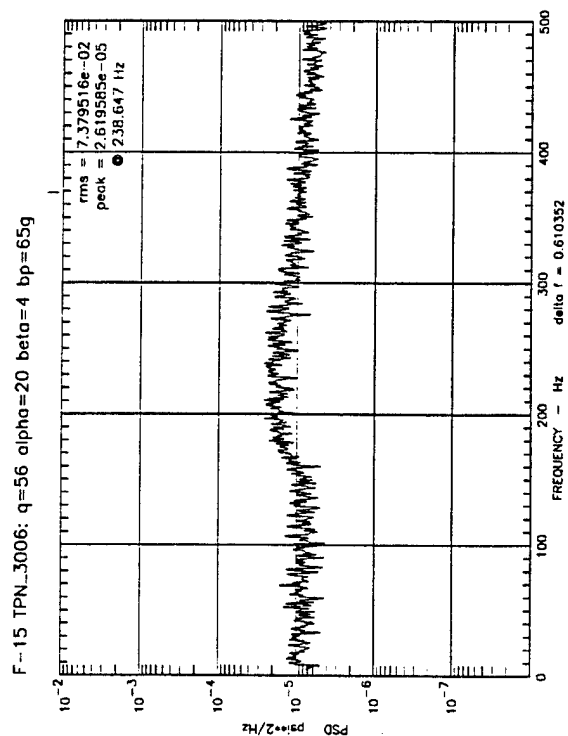
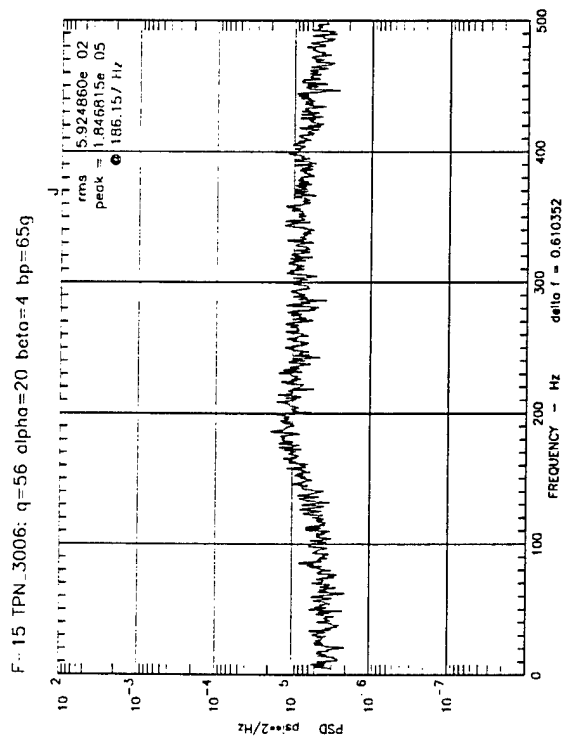


F-15 TPN 3006: q=56 alpha=20 beta=4 bp=65g

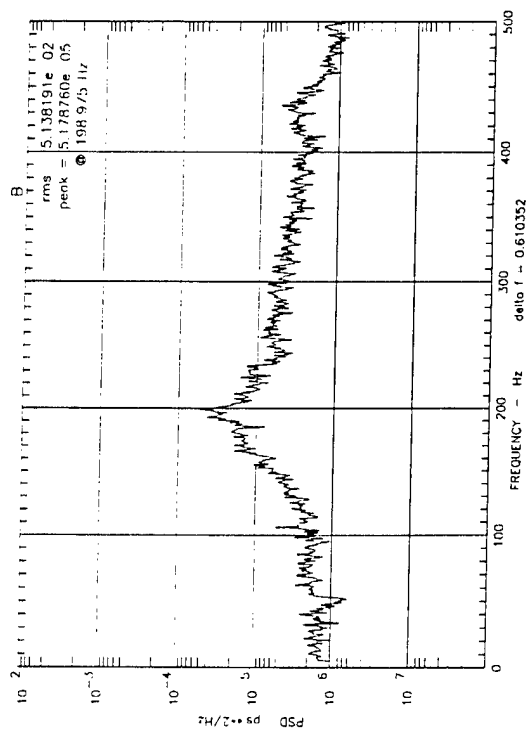


F-15 TPN 3006: q=56 alpha=20 beta=4 bp=65g

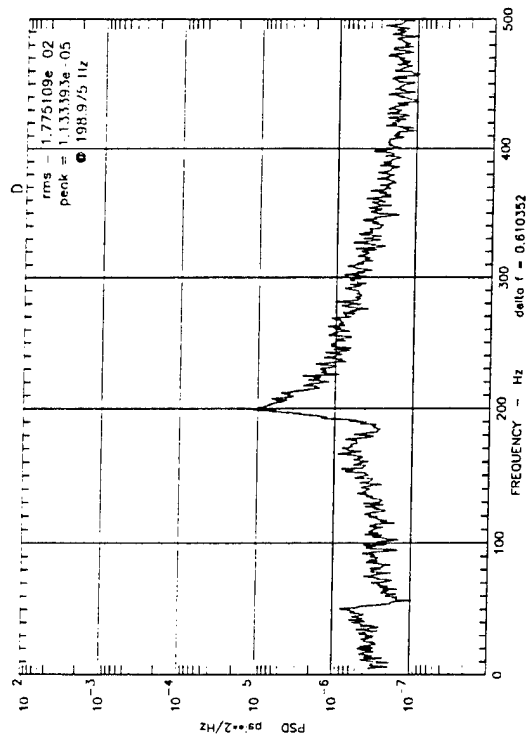




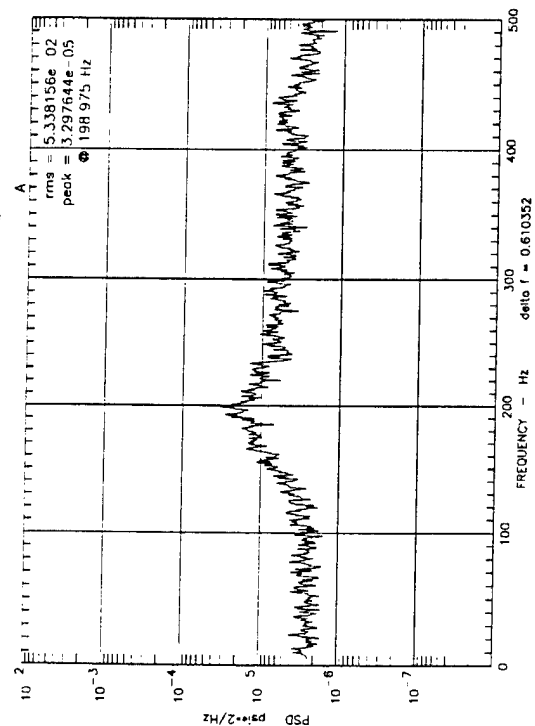
F 15 TPN 3008: q=56 alpha=24 beta=4 bp=65g



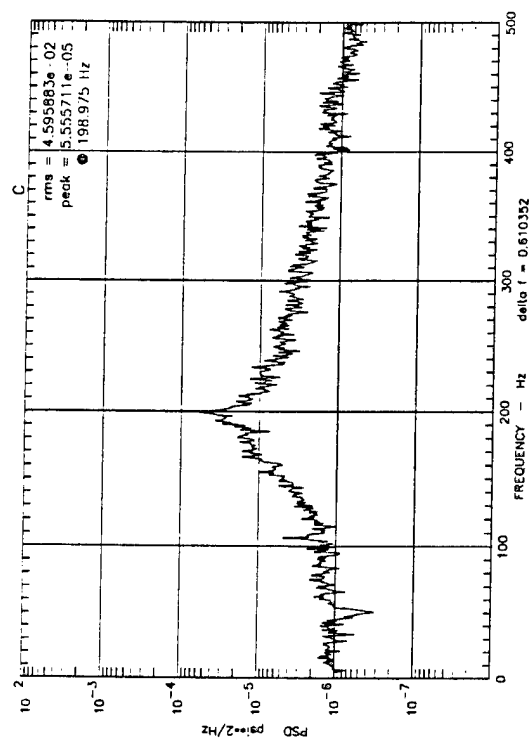
F 15 TPN 3008: q=56 alpha=24 beta=4 bp=65g



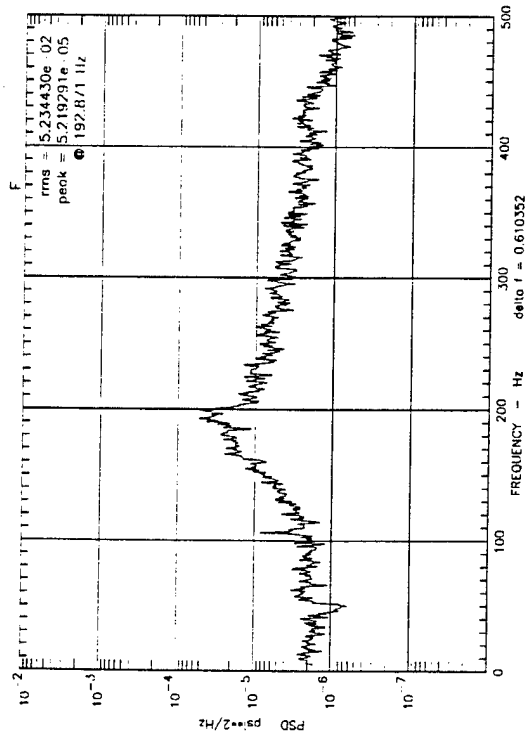
F 15 TPN 3008: q=56 alpha=24 beta=4 bp=65g



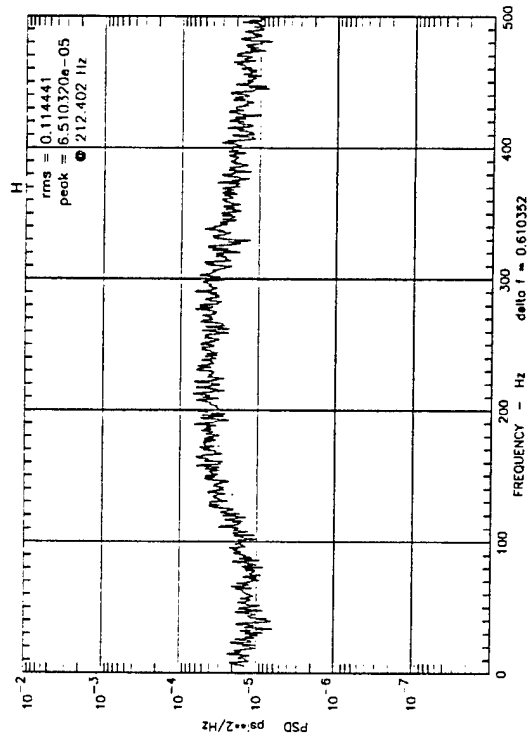
F 15 TPN 3008: q=56 alpha=24 beta=4 bp=65g



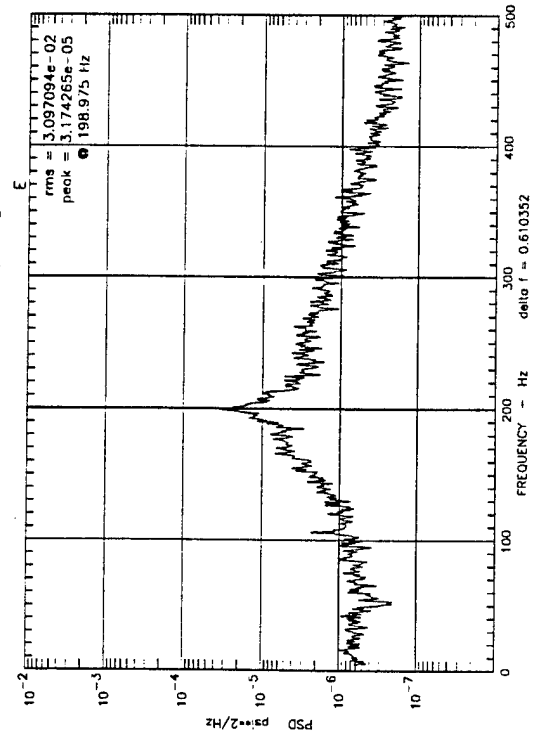
F-15 TPN\_3008: q=56 alpha=24 beta=4 bp=65g



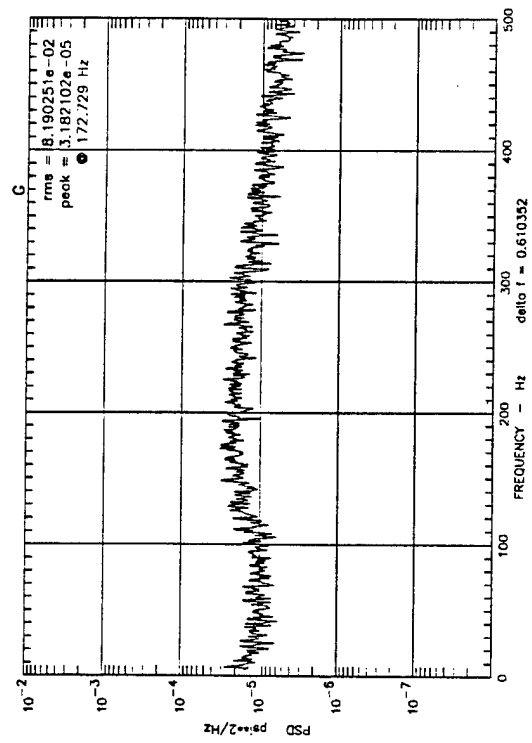
F-15 TPN\_3008: q=56 alpha=24 beta=4 bp=65g



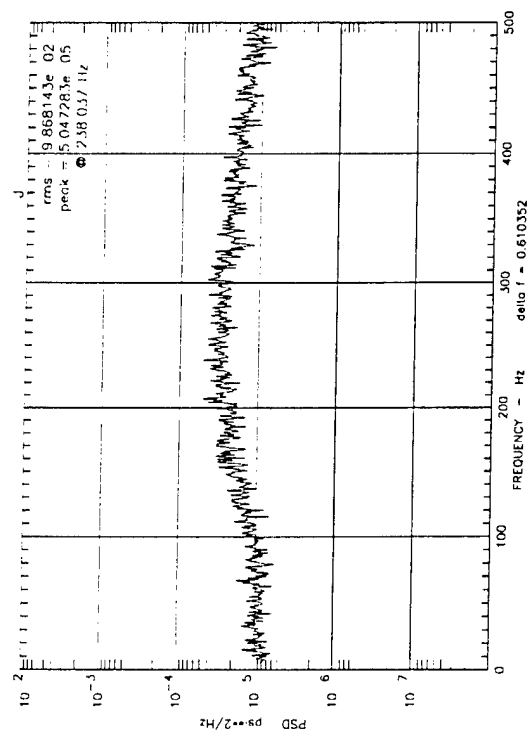
F-15 TPN\_3008: q=56 alpha=24 beta=4 bp=65g



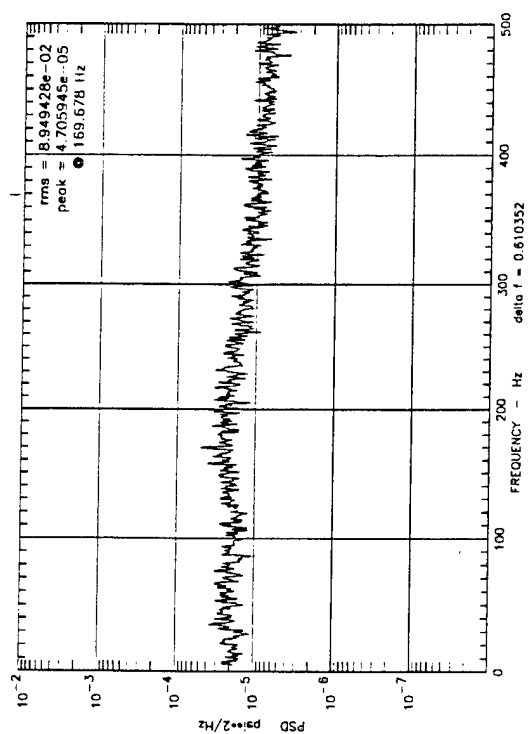
F-15 TPN\_3008: q=56 alpha=24 beta=4 bp=65g



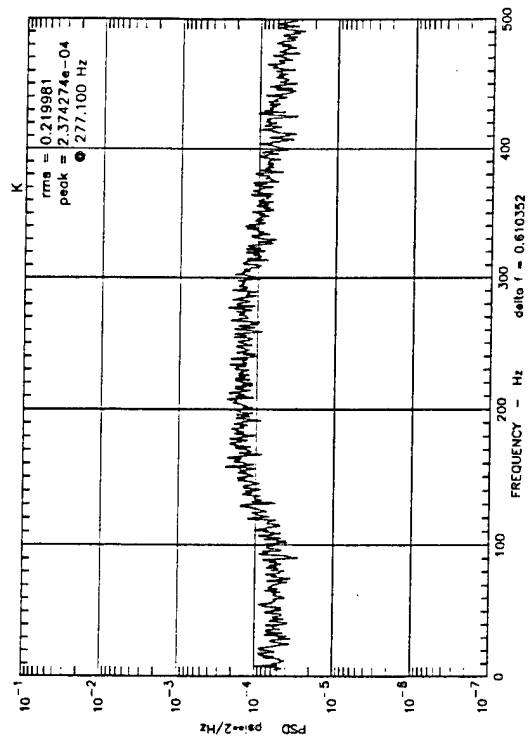
F-15 TPN\_3008: q=56 alpha=24 beta=4 bp=65g



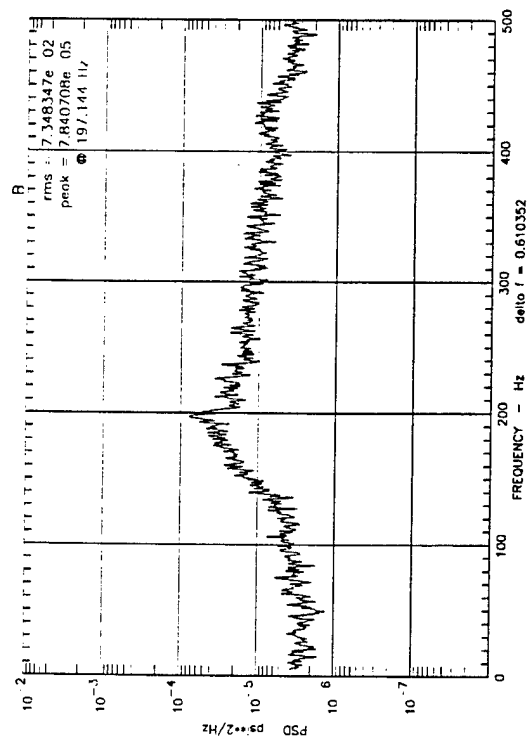
F-15 TPN\_3008: q=56 alpha=24 beta=4 bp=65g



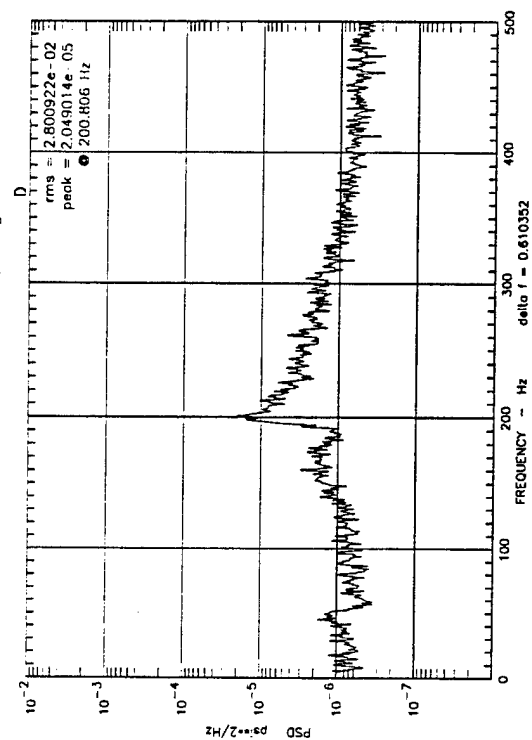
F-15 TPN\_3008: q=56 alpha=24 beta=4 bp=65g



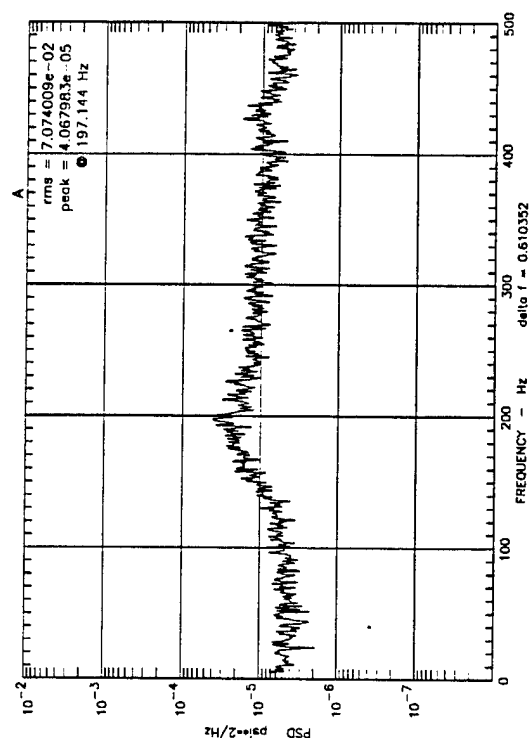
F-15 TPN\_3009: q=56 alpha=26 beta=4 bp=65g



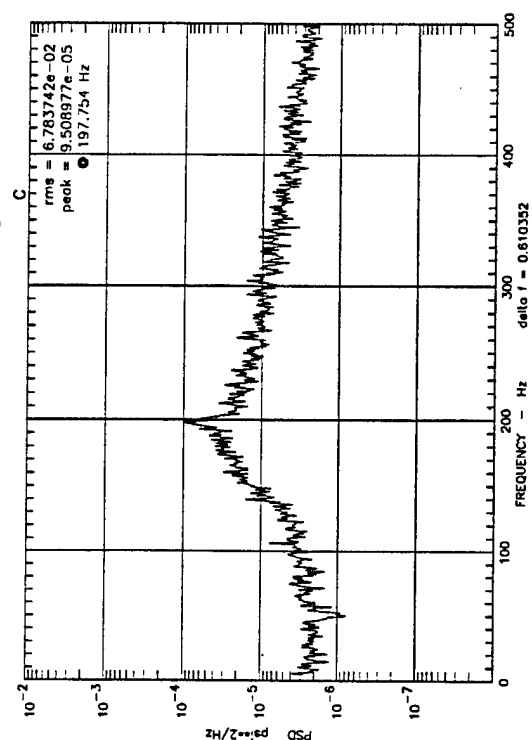
F-15 TPN\_3009: q=56 alpha=26 beta=4 bp=65g



F-15 TPN\_3009: q=56 alpha=26 beta=4 bp=65g

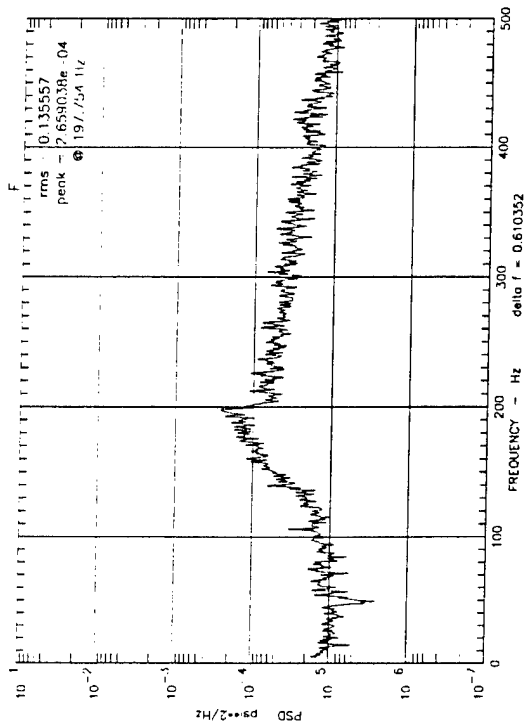


F-15 TPN\_3009: q=56 alpha=26 beta=4 bp=65g

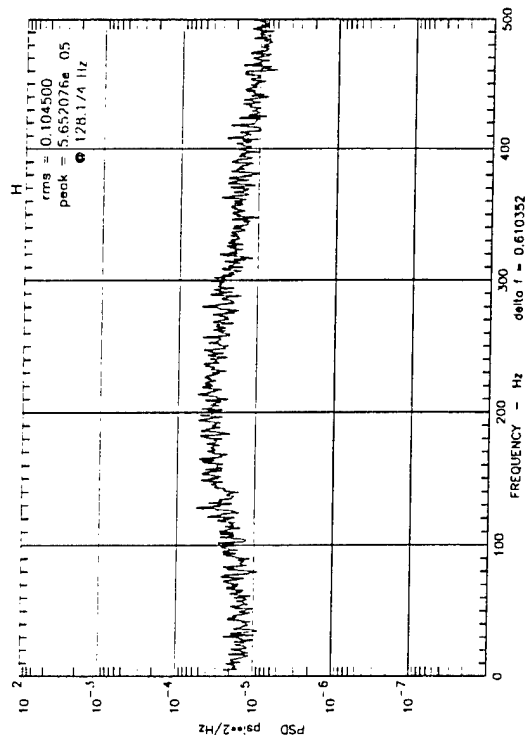




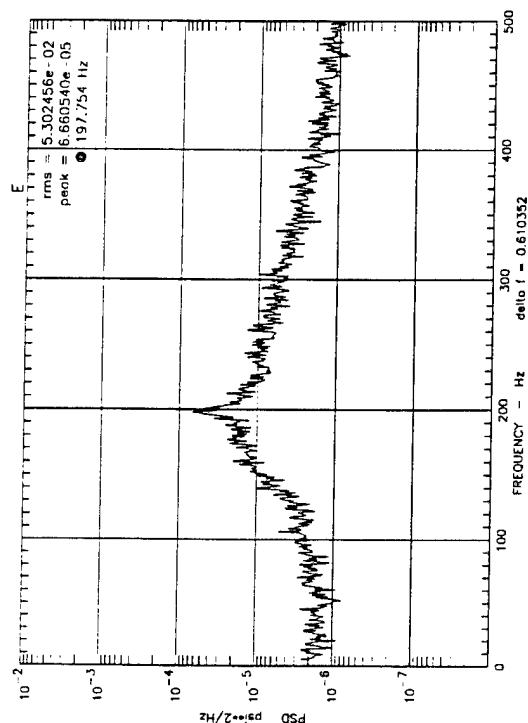
F 15 TPN 3009: q=56 alpha=26 beta=4 bp=65g



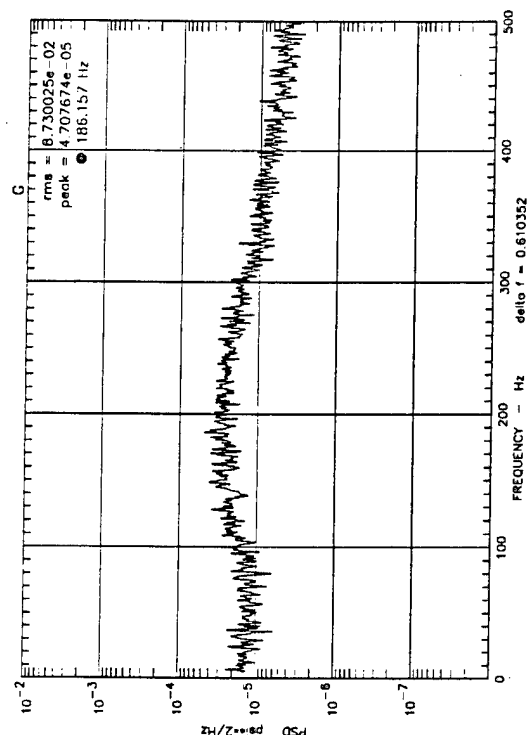
F 15 TPN 3009: q=56 alpha=26 beta=4 bp=65g

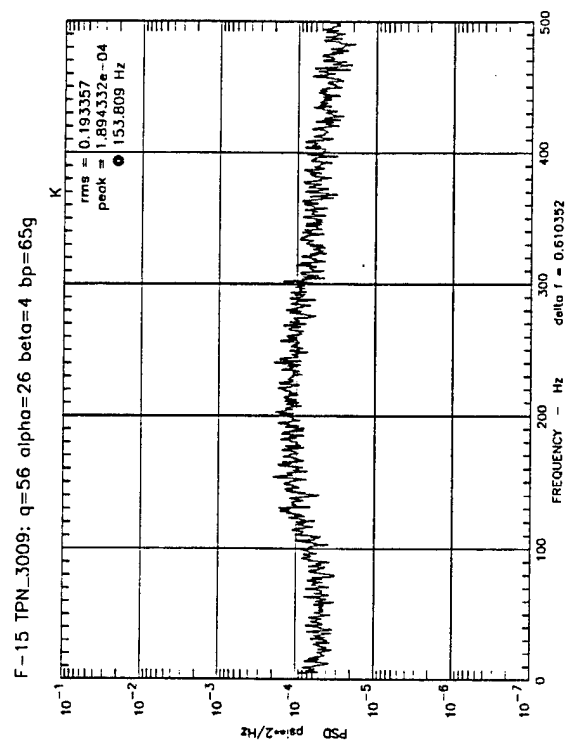
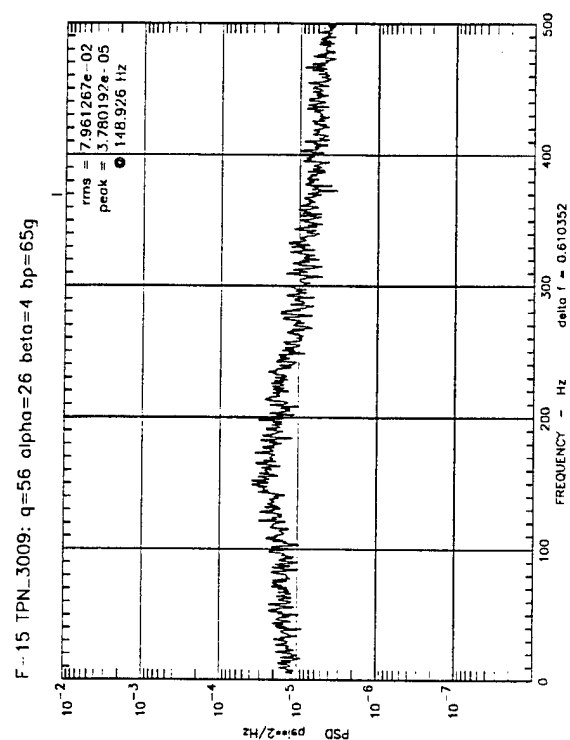
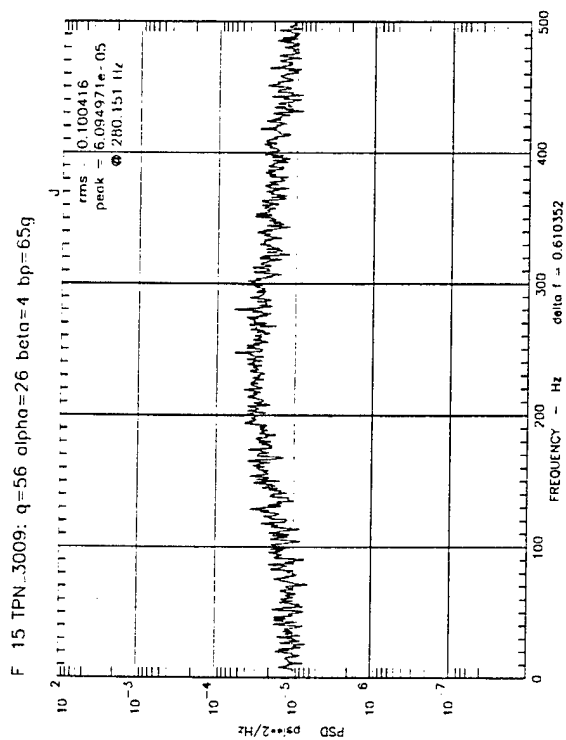


F 15 TPN 3009: q=56 alpha=26 beta=4 bp=65g

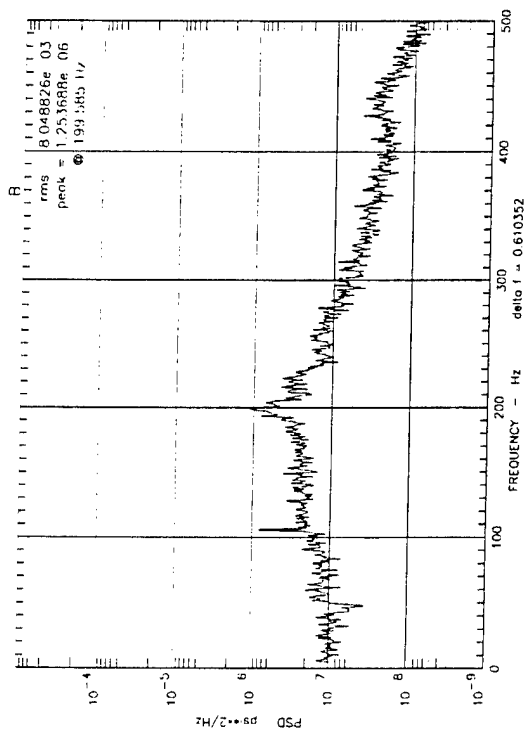


F 15 TPN 3009: q=56 alpha=26 beta=4 bp=65g

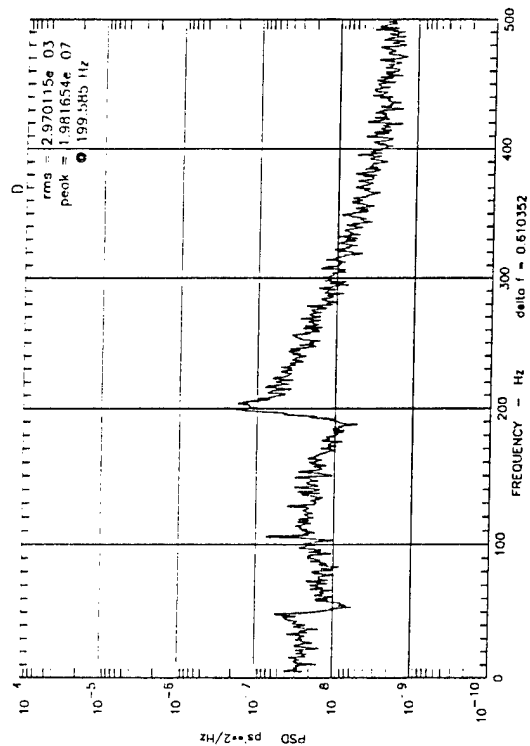




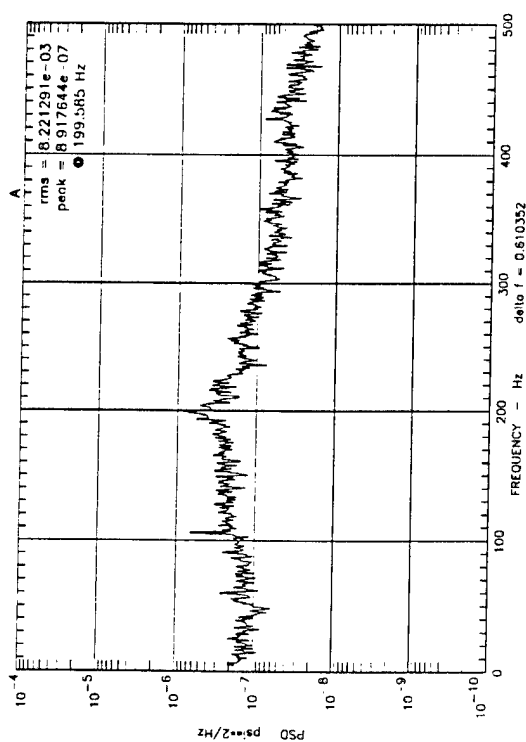
F 15 TPN 2998: q=56 alpha=16 beta=0 bp=65g



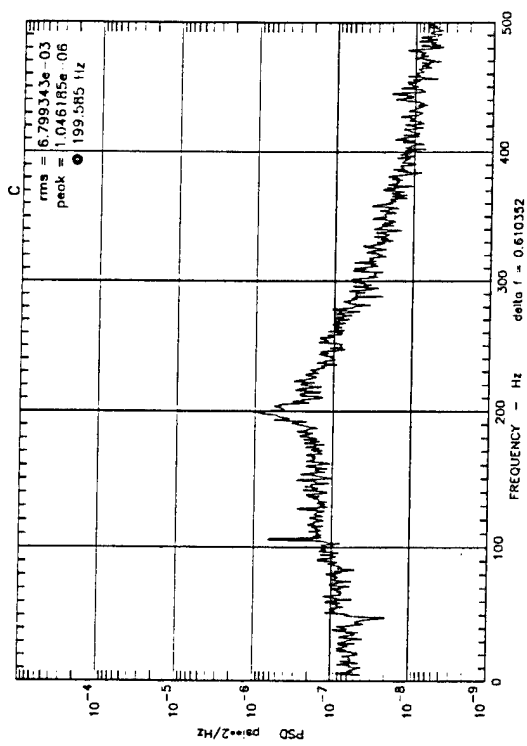
F 15 TPN 2998: q=56 alpha=16 beta=0 bp=65g



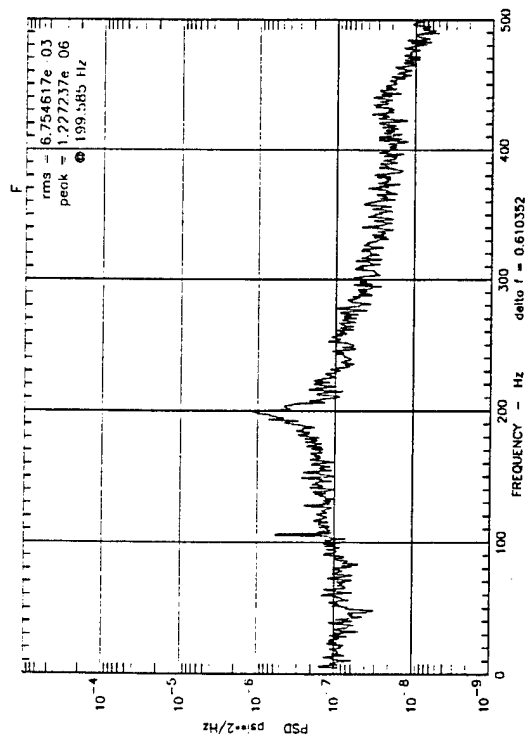
F 15 TPN 2998: q=56 alpha=16 beta=0 bp=65g



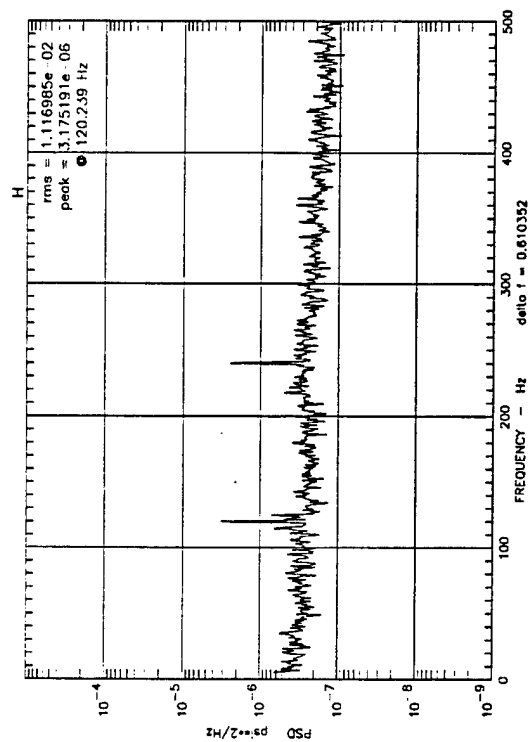
F 15 TPN 2998: q=56 alpha=16 beta=0 bp=65g



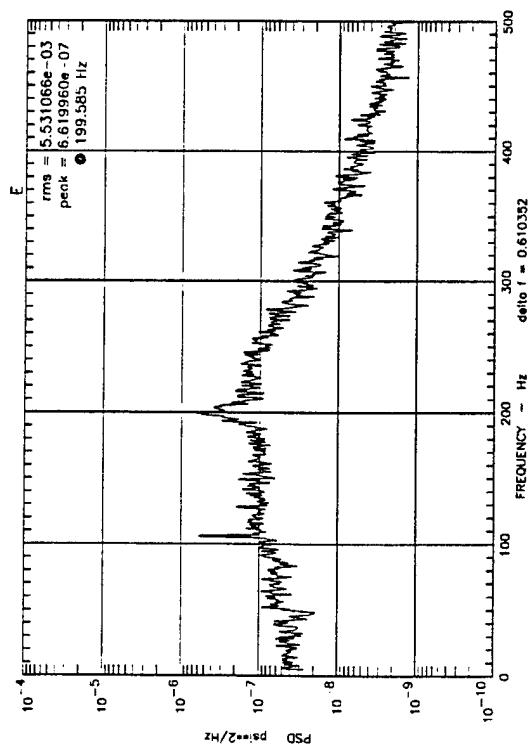
F 15 TPN 2998: q=56 alpha=16 beta=0 bp=65g



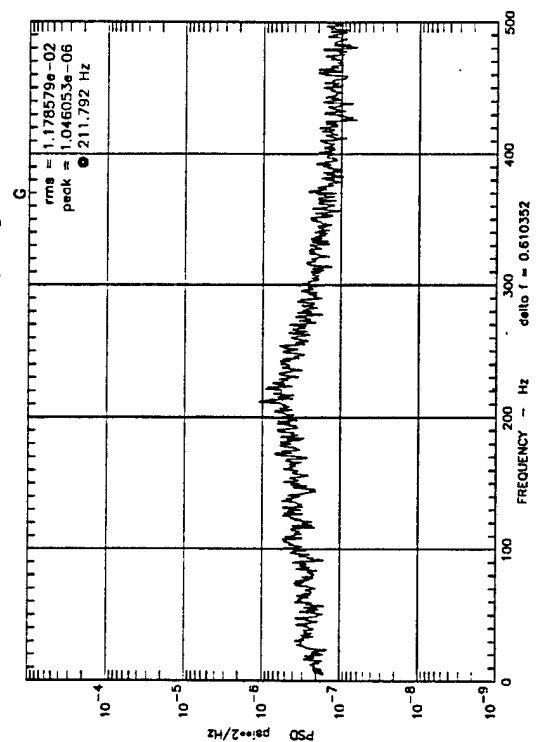
F-15 TPN 2998: q=56 alpha=16 beta=0 bp=65g



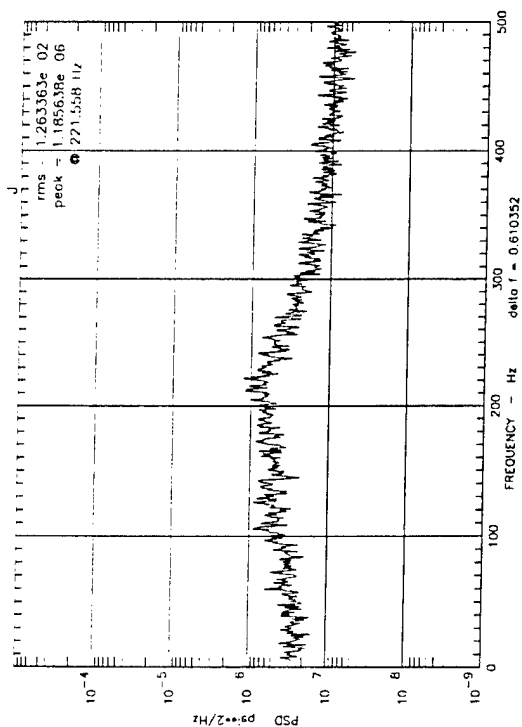
F-15 TPN 2998: q=56 alpha=16 beta=0 bp=65g



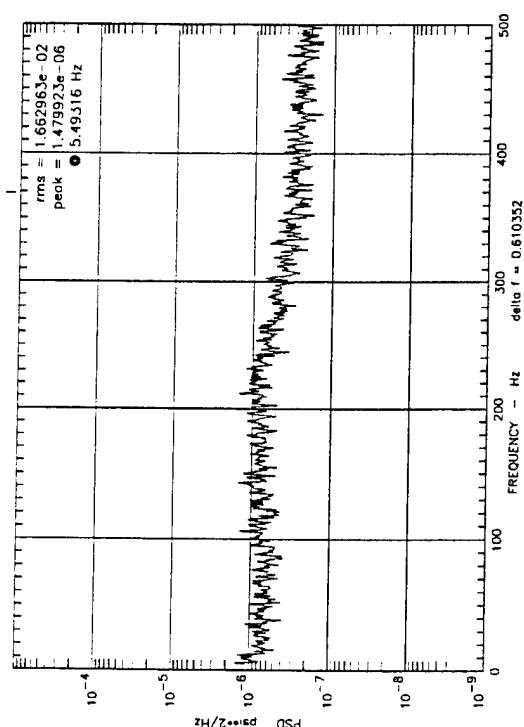
F-15 TPN 2998: q=56 alpha=16 beta=0 bp=65g



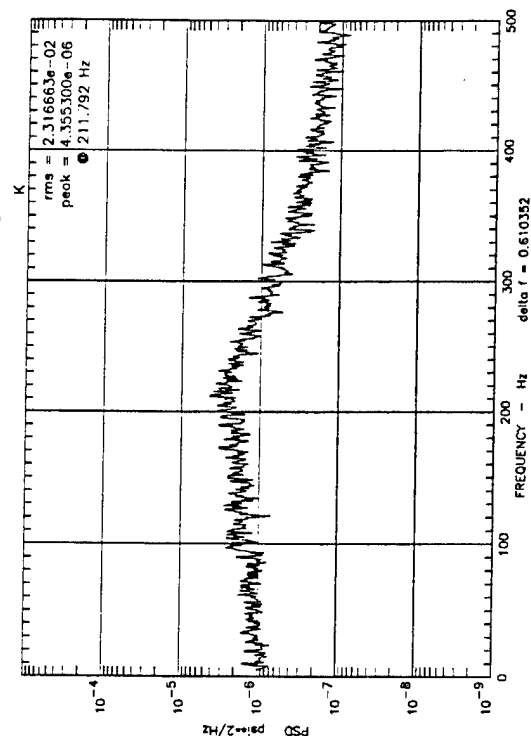
F-15 TPN\_2998: q=56 alpha=16 beta=0 bp=65g



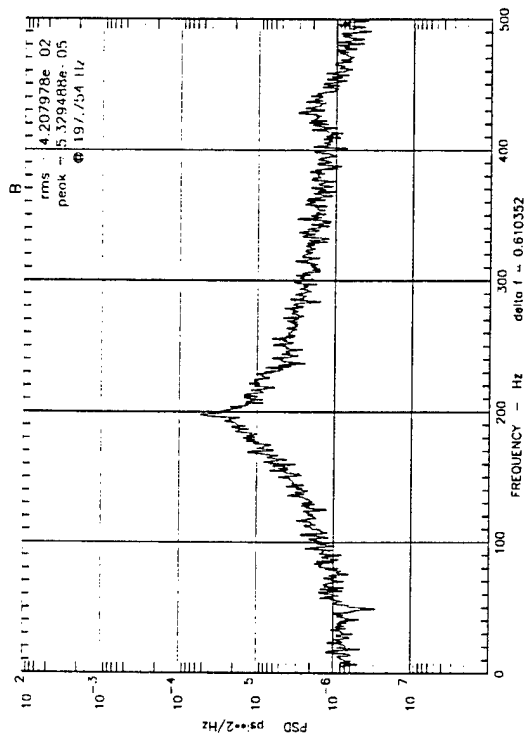
F-15 TPN\_2998: q=56 alpha=16 beta=0 bp=65g



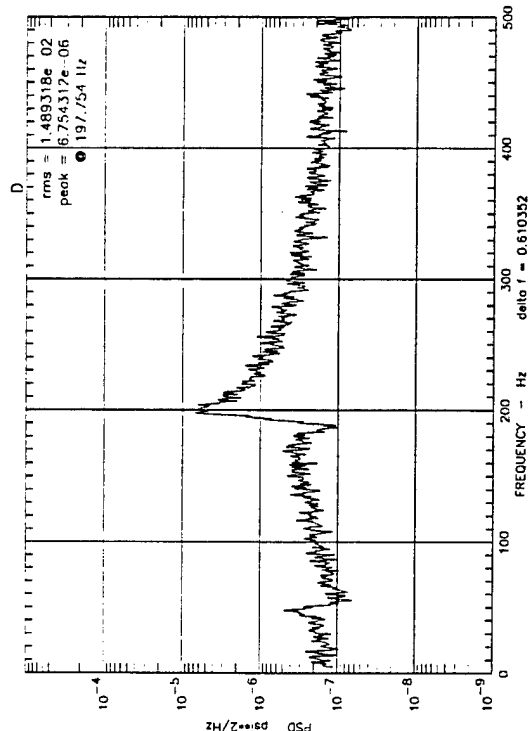
F-15 TPN\_2998: q=56 alpha=16 beta=0 bp=65g



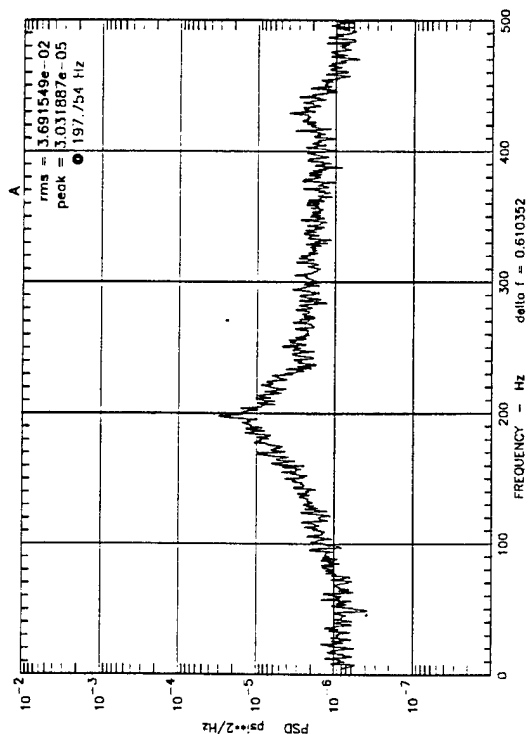
F 15 TPN 3000: q=56 alpha=20 beta=0 bp=65g



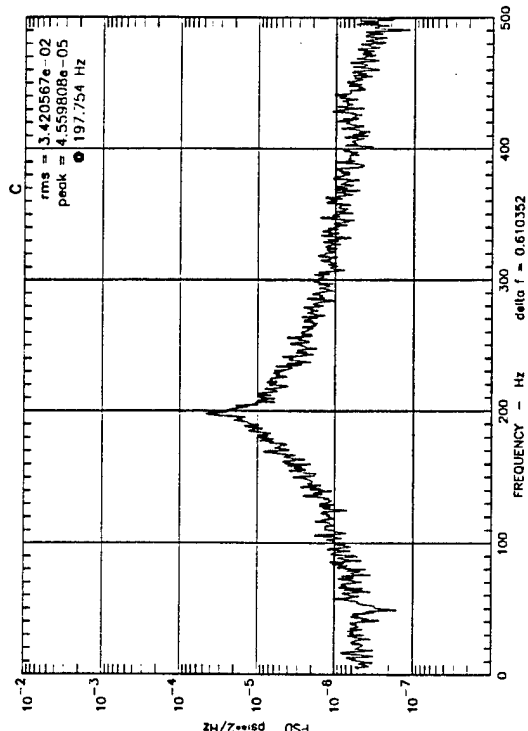
F-15 TPN 3000: q=56 alpha=20 beta=0 bp=65g



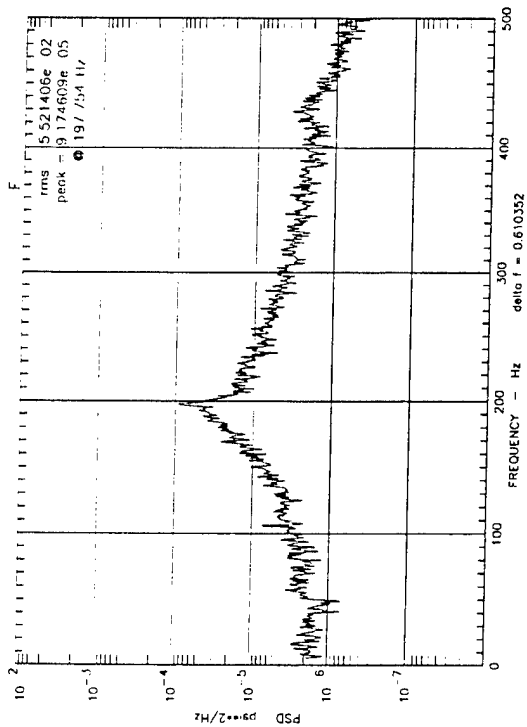
F-15 TPN 3000: q=56 alpha=20 beta=0 bp=65g



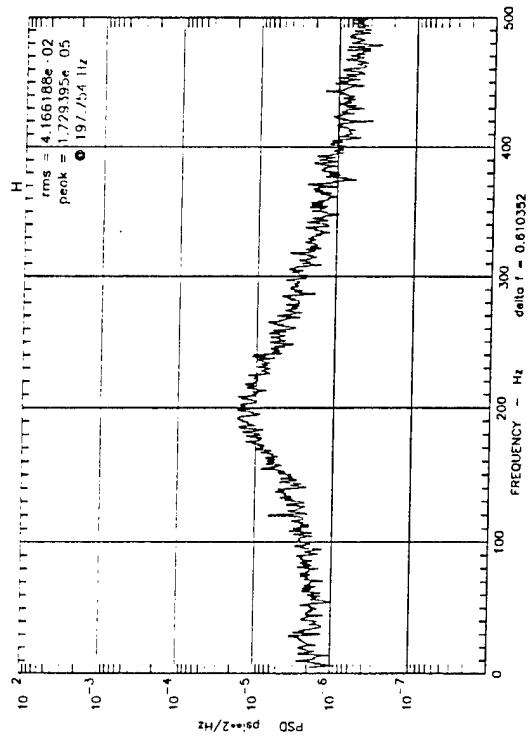
F-15 TPN 3000: q=56 alpha=20 beta=0 bp=65g



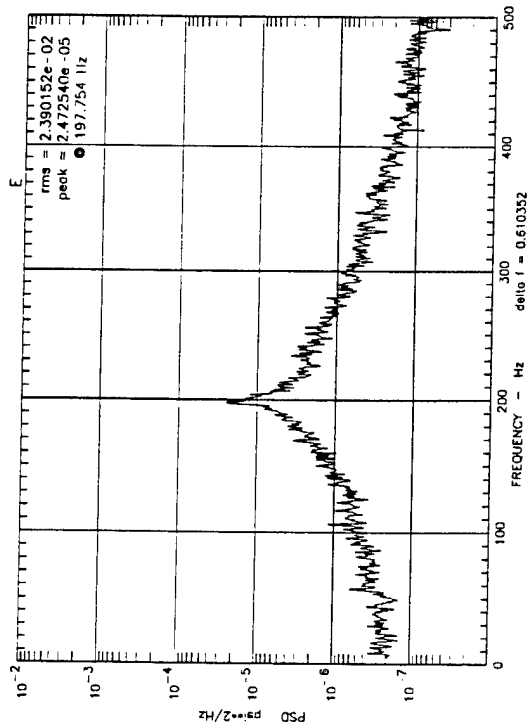
F-15 TPN\_3000: q=56 alpha=20 beta=0 bp=65g



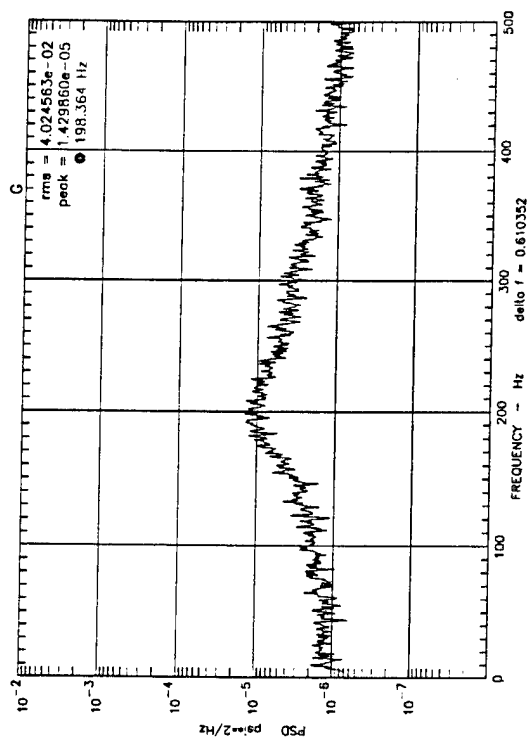
F-15 TPN\_3000: q=56 alpha=20 beta=0 bp=65g



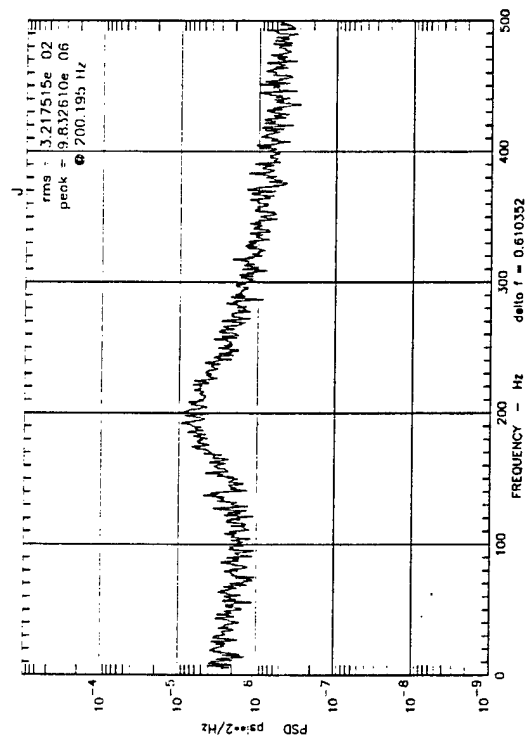
F-15 TPN\_3000: q=56 alpha=20 beta=0 bp=65g



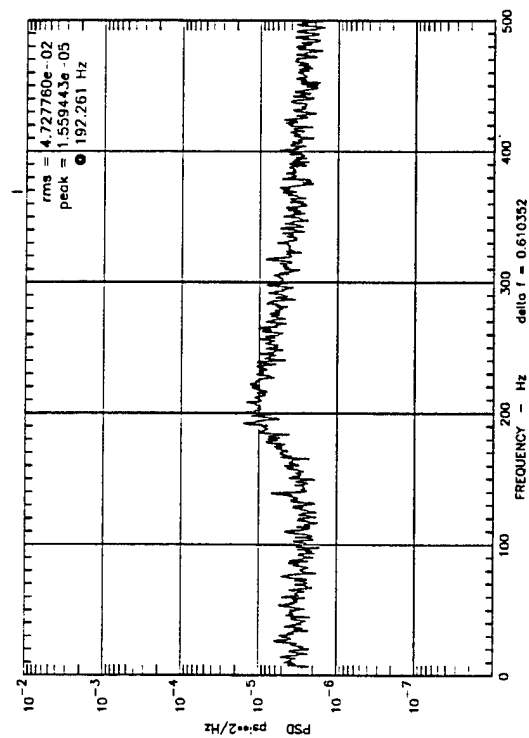
F-15 TPN\_3000: q=56 alpha=20 beta=0 bp=65g



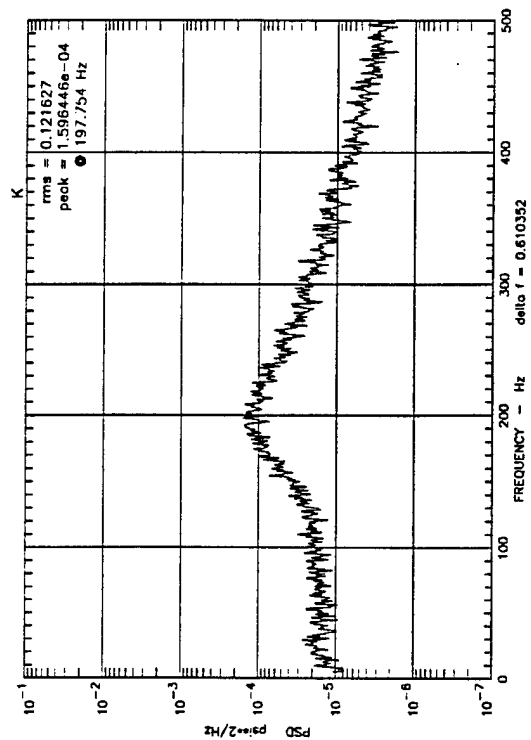
F-15 TPN\_3000: q=56 alpha=20 beta=0 bp=65g



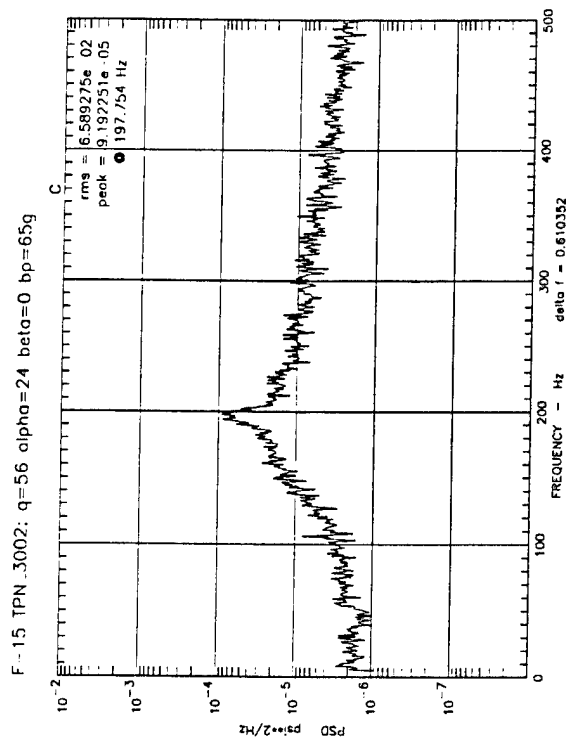
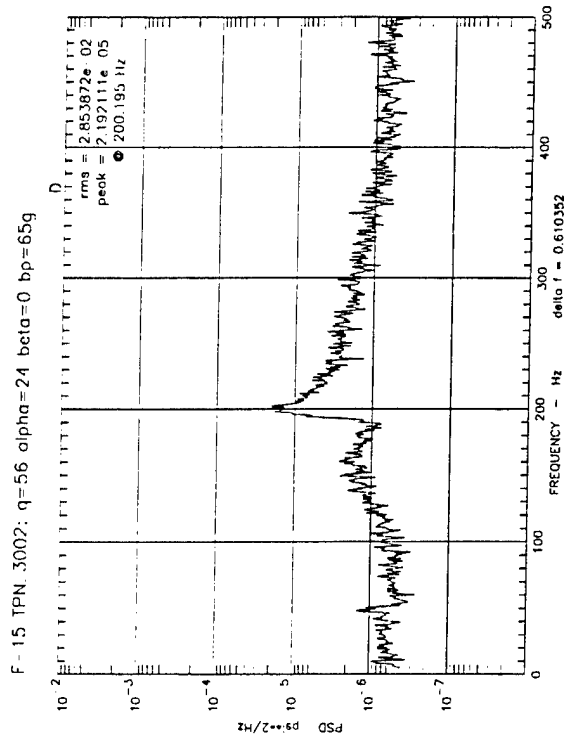
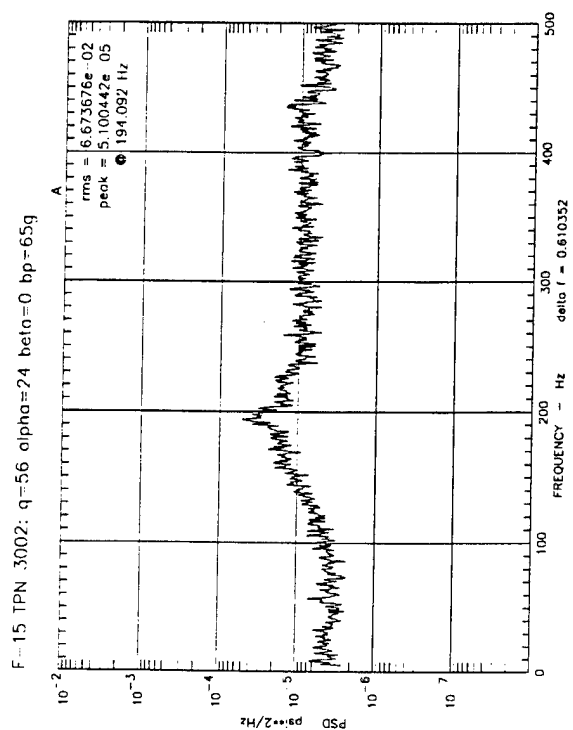
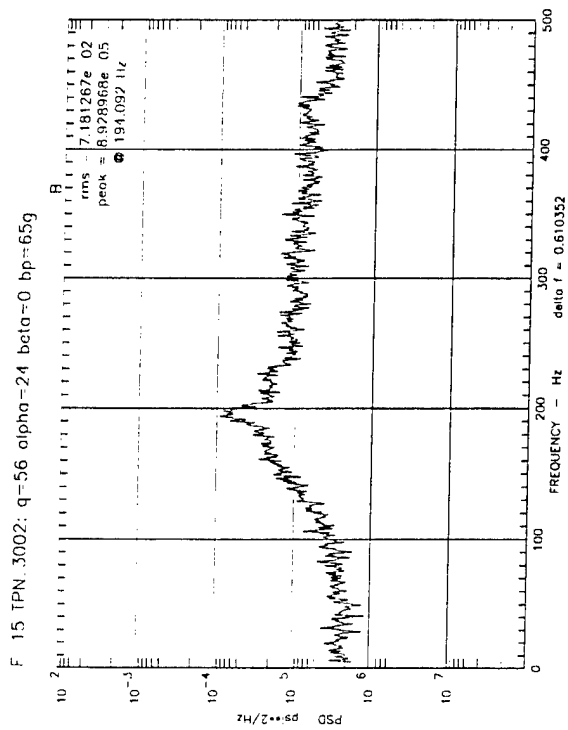
F-15 TPN\_3000: q=56 alpha=20 beta=0 bp=65g



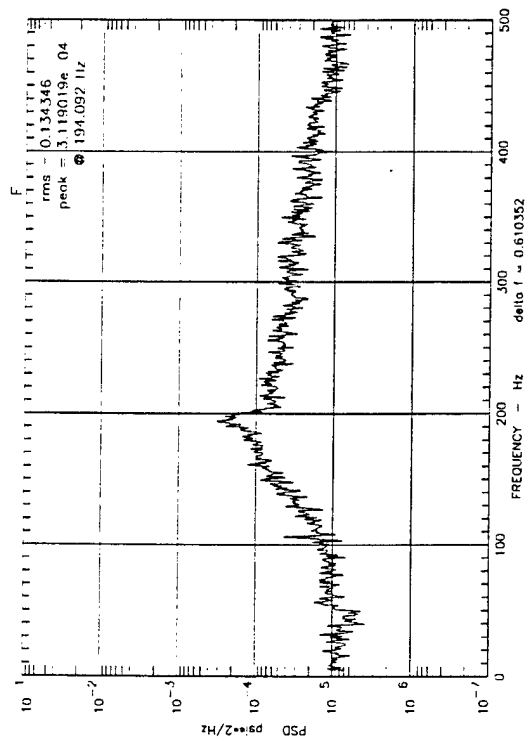
F-15 TPN\_3000: q=56 alpha=20 beta=0 bp=65g



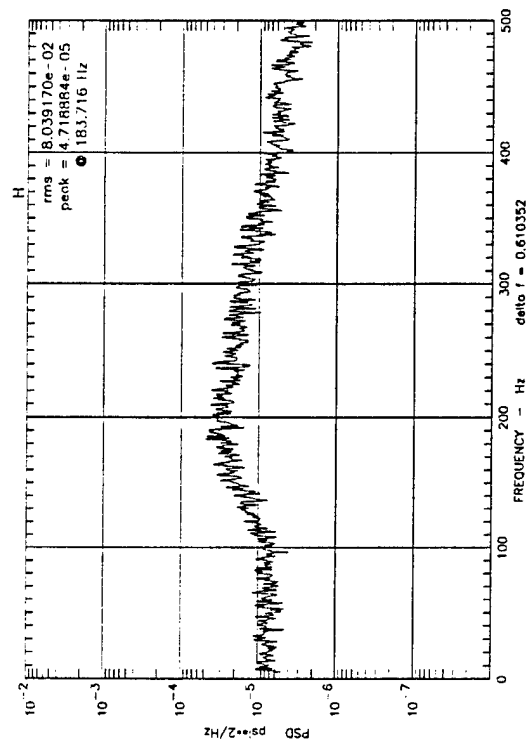




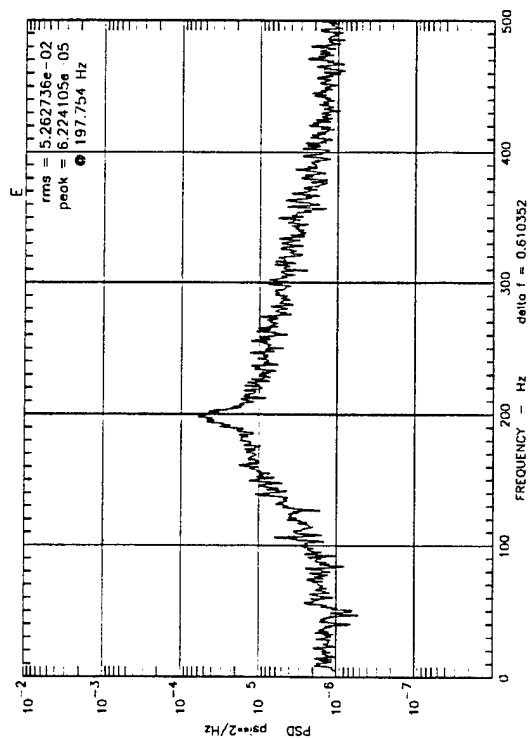
F 15 TPN\_3002: q=56 alpha=24 beta=0 bp=65g



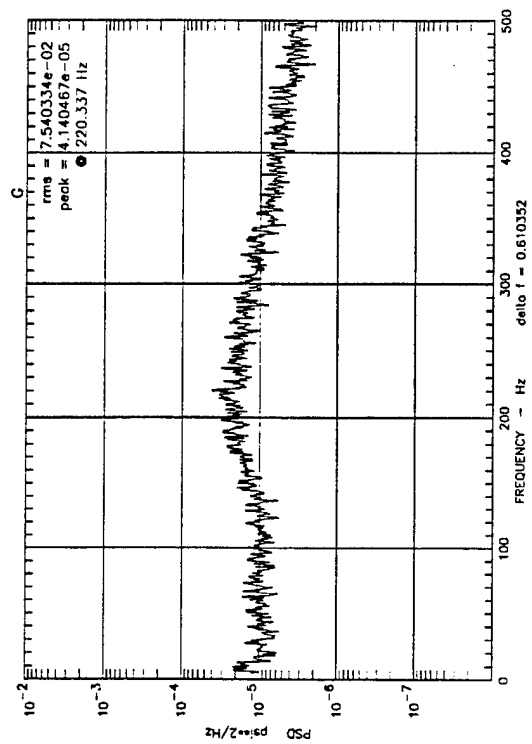
F -15 TPN\_3002: q=56 alpha=24 beta=0 bp=65g



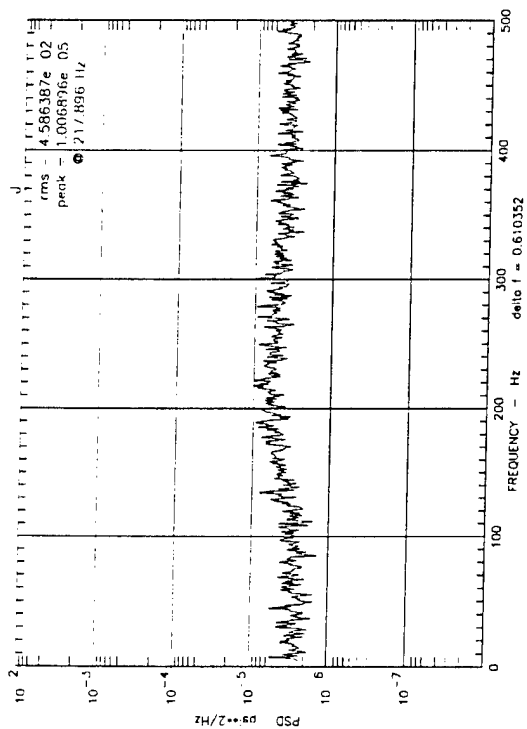
F -15 TPN\_3002: q=56 alpha=24 beta=0 bp=65g



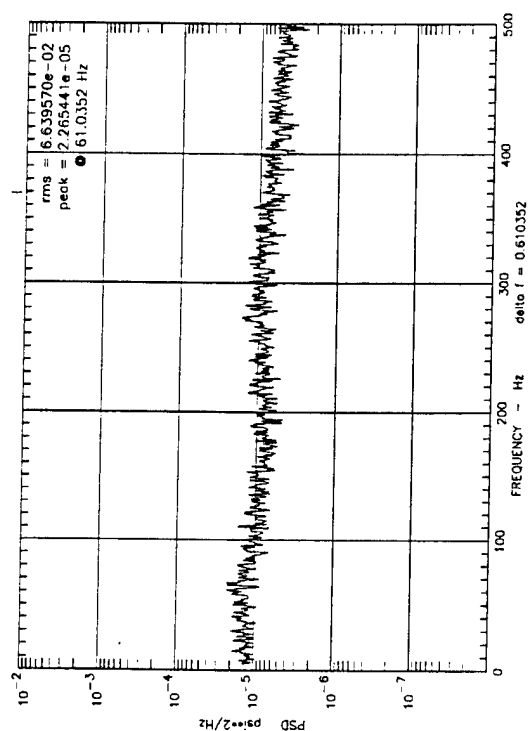
F -15 TPN\_3002: q=56 alpha=24 beta=0 bp=65g



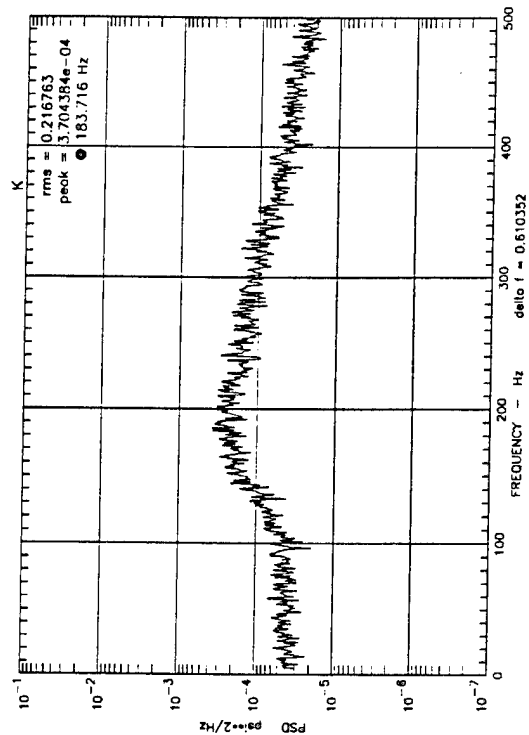
F-15 TPN\_3002: q=56 alpha=24 beta=0 bp=65g



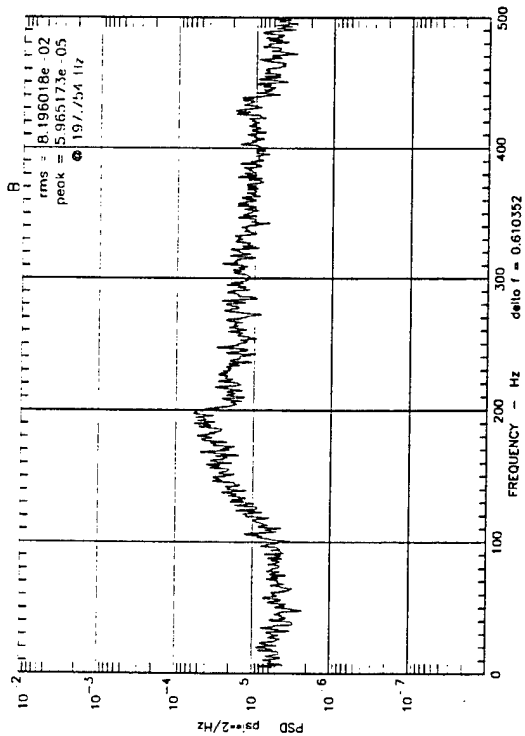
F-15 TPN\_3002: q=56 alpha=24 beta=0 bp=65g



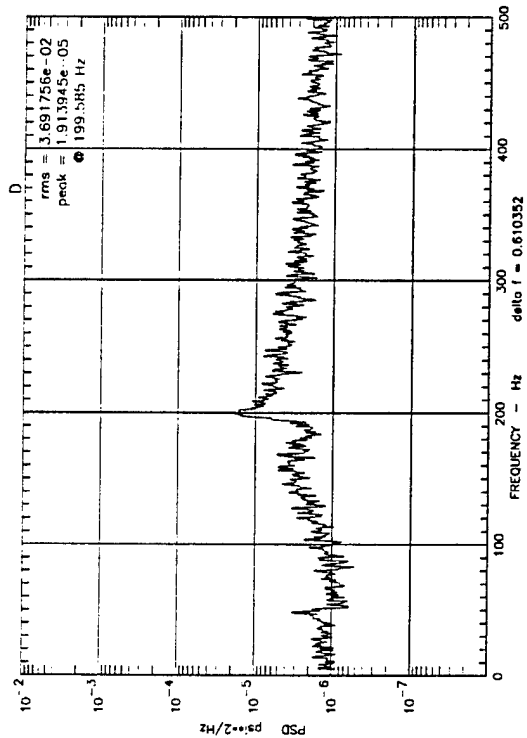
F-15 TPN\_3002: q=56 alpha=24 beta=0 bp=65g



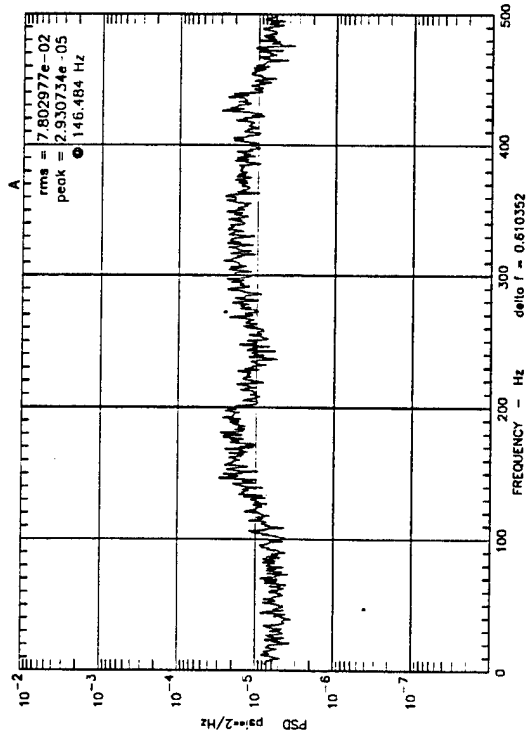
F-15 TPN\_3003: q=56 alpha=26 beta=0 bp=65g



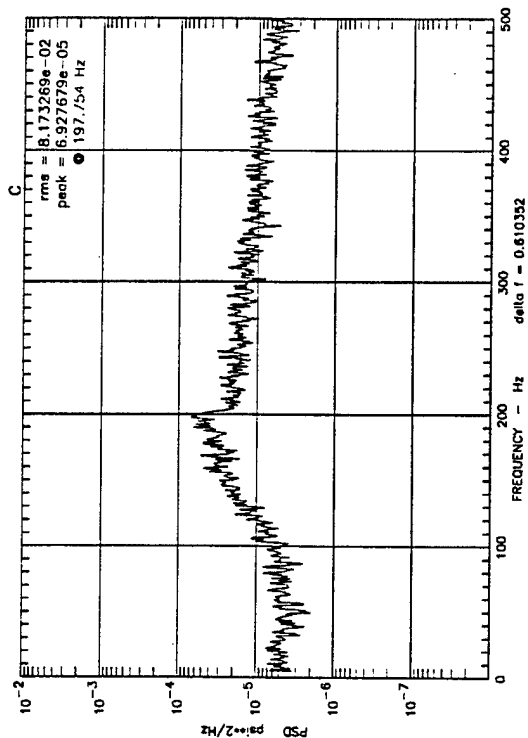
F-15 TPN\_3003: q=56 alpha=26 beta=0 bp=65g

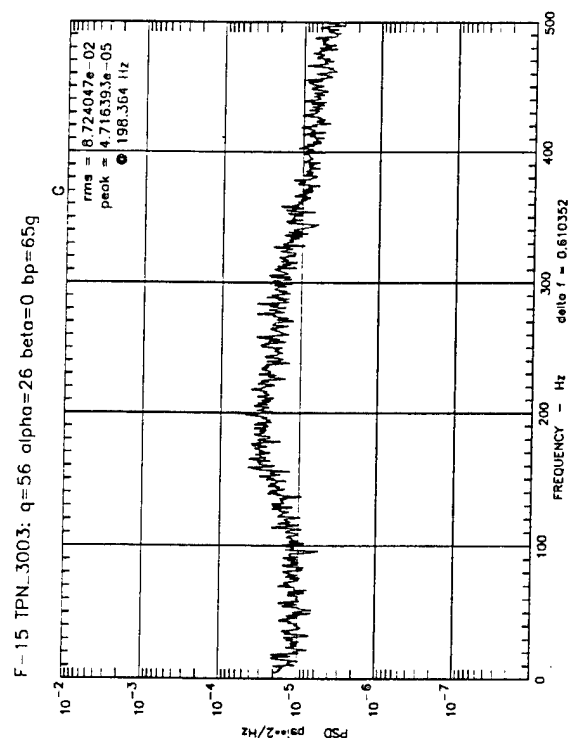
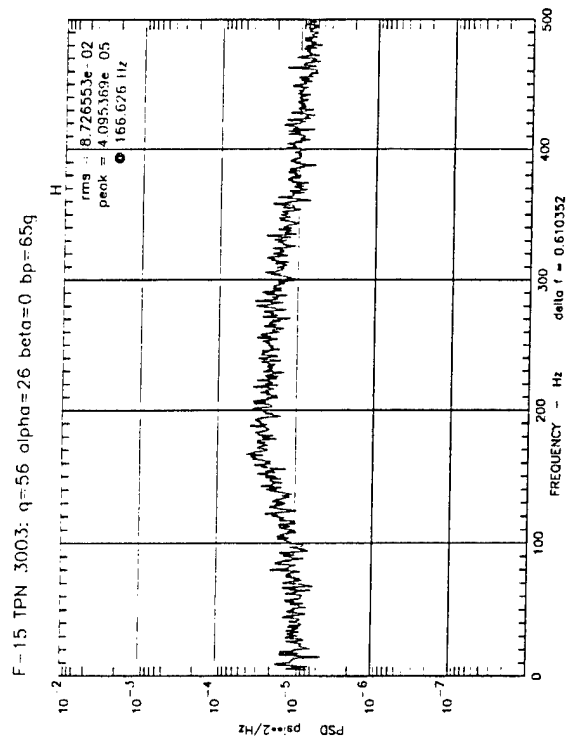
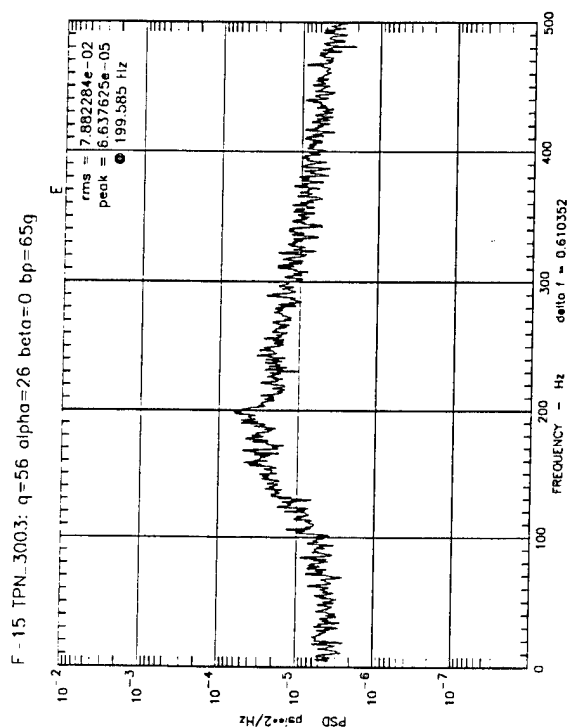
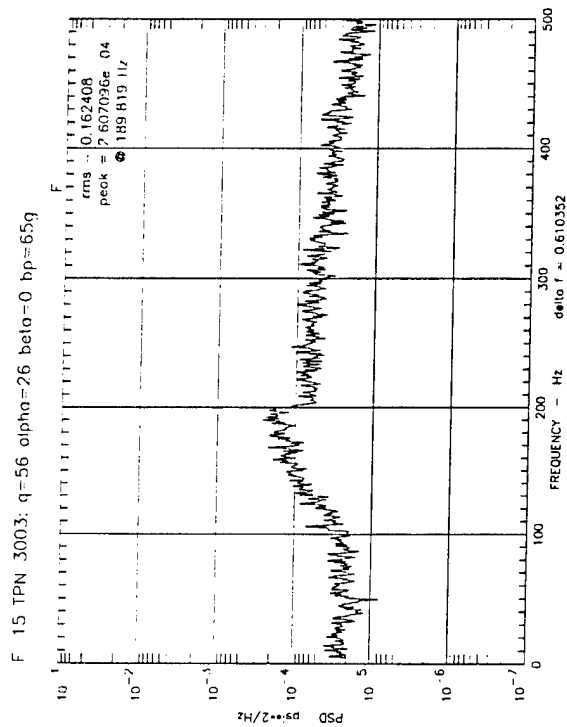


F-15 TPN\_3003: q=56 alpha=26 beta=0 bp=65g

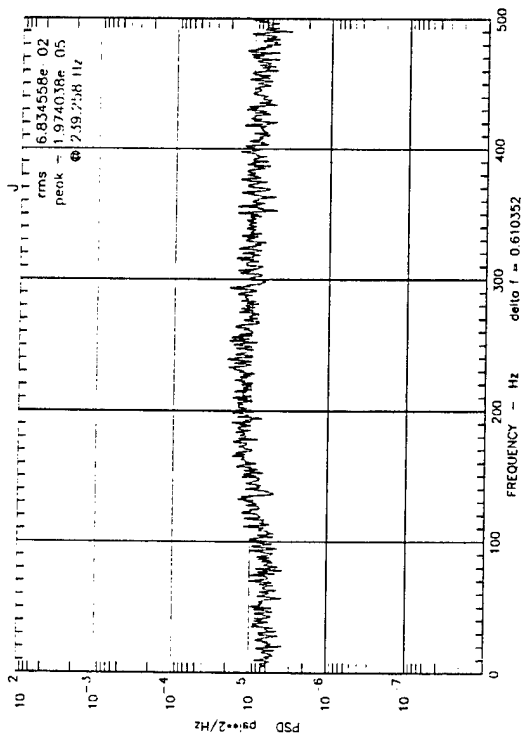


F-15 TPN\_3003: q=56 alpha=26 beta=0 bp=65g

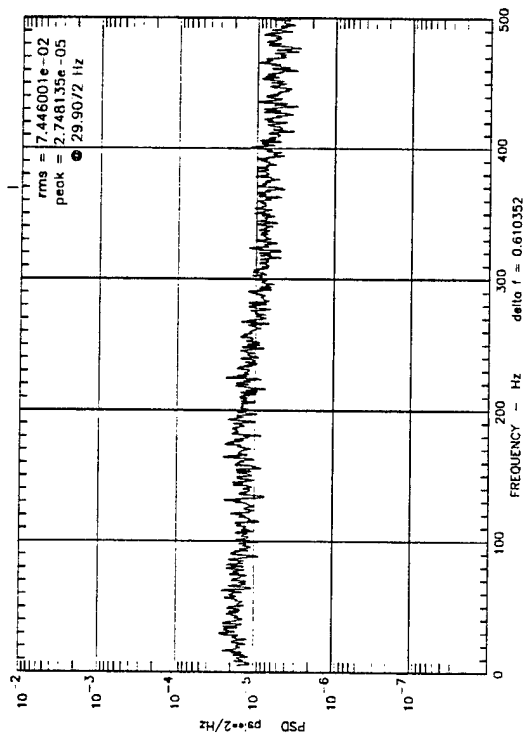




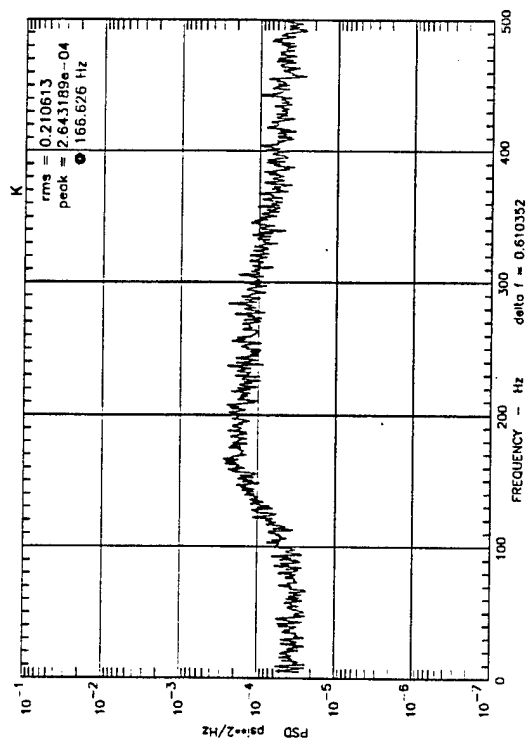
F-15 TPN\_3003: q=56 alpha=26 beta=0 bp=65g



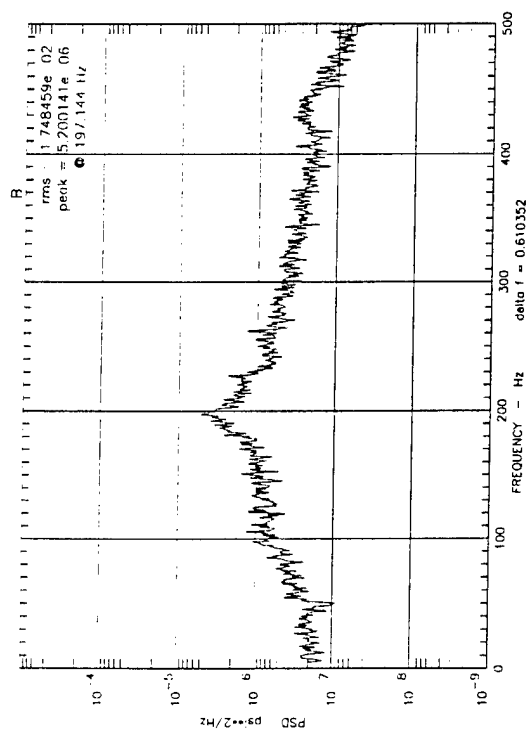
F-15 TPN\_3003: q=56 alpha=26 beta=0 bp=65g



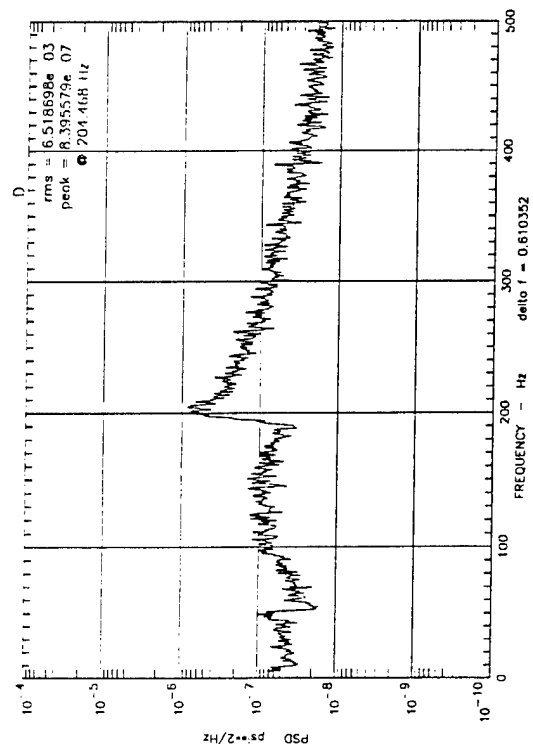
F-15 TPN\_3003: q=56 alpha=26 beta=0 bp=65g



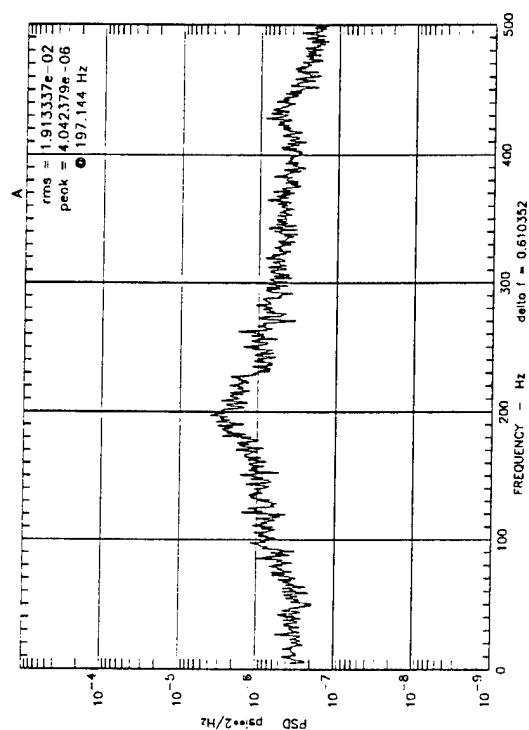
F 15 TPN 2992: q=56 alpha=16 beta=-4 bp=65g



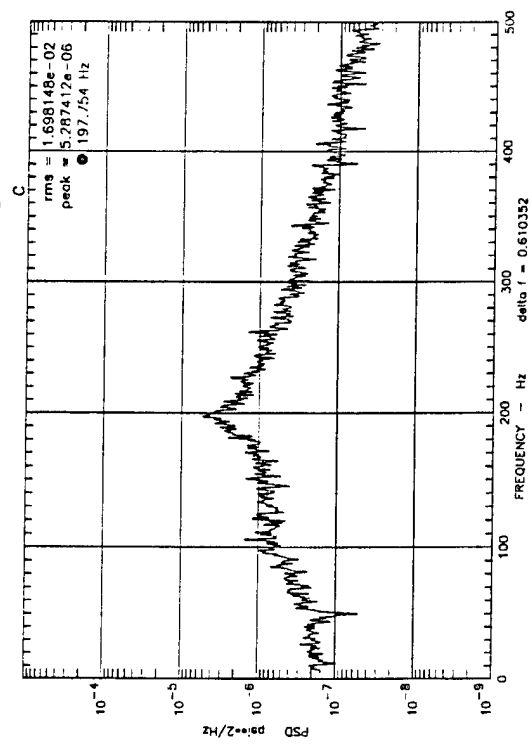
F 15 TPN 2992: q=56 alpha=16 beta=-4 bp=65g



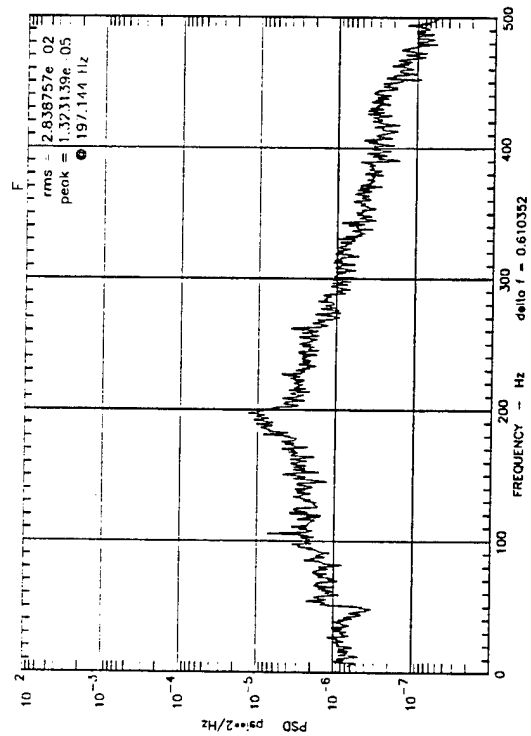
F 15 TPN 2992: q=56 alpha=16 beta=-4 bp=65g



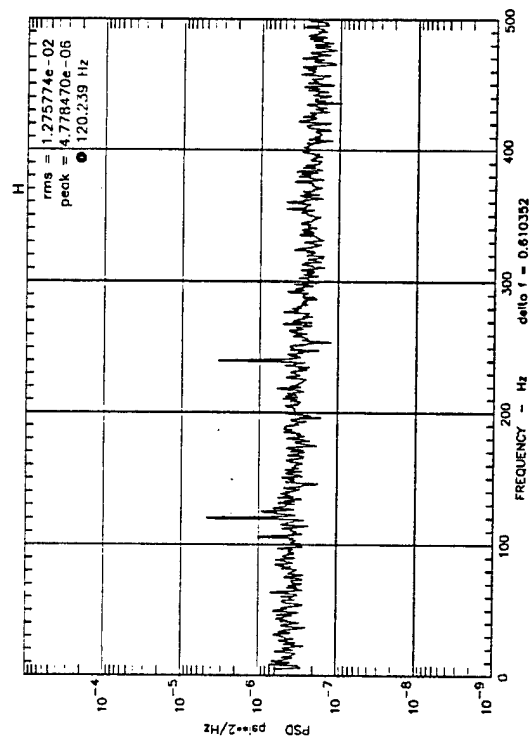
F 15 TPN 2992: q=56 alpha=16 beta=-4 bp=65g



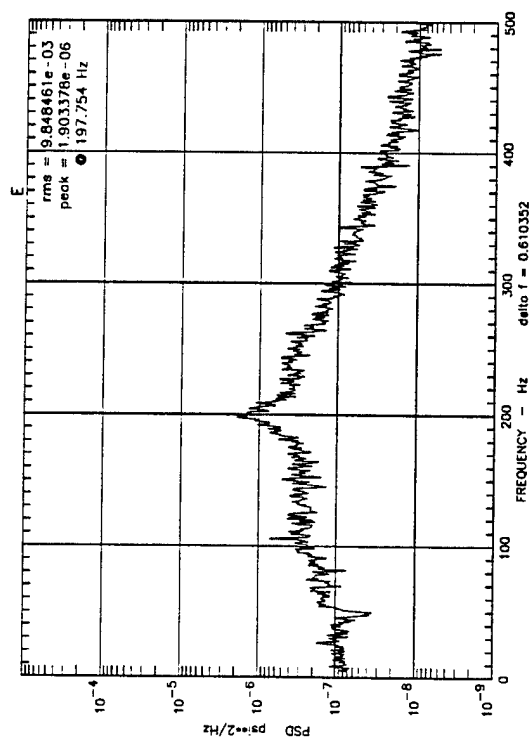
F-15 TPN.2992: q=56 alpha=16 beta=-4 bp=65g



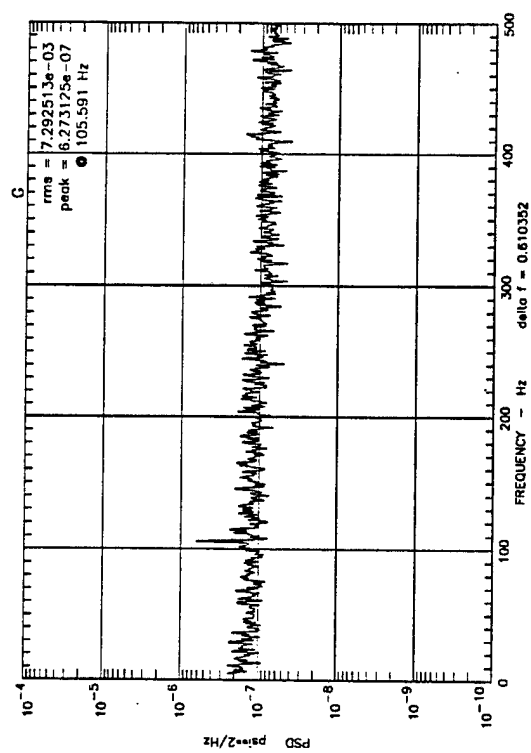
F-15 TPN.2992: q=56 alpha=16 beta=-4 bp=65g



F-15 TPN.2992: q=56 alpha=16 beta=-4 bp=65g

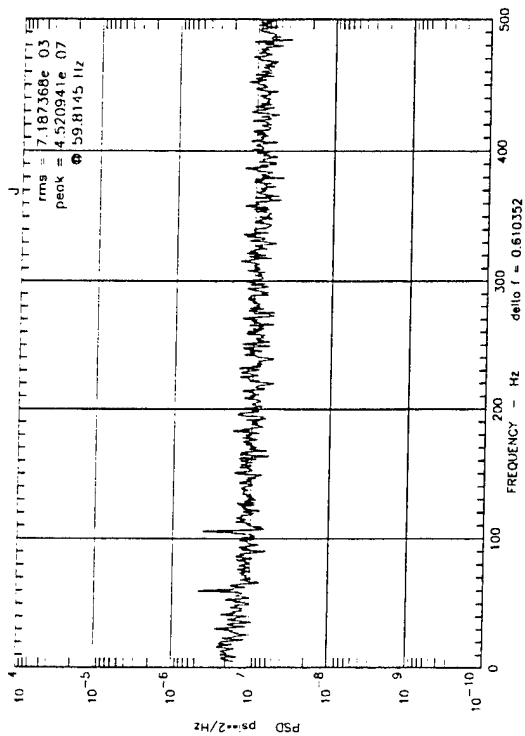


F-15 TPN.2992: q=56 alpha=16 beta=-4 bp=65g

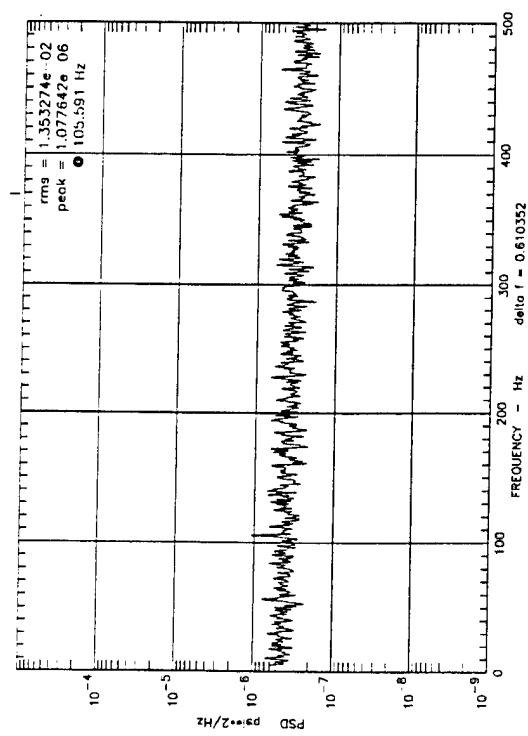




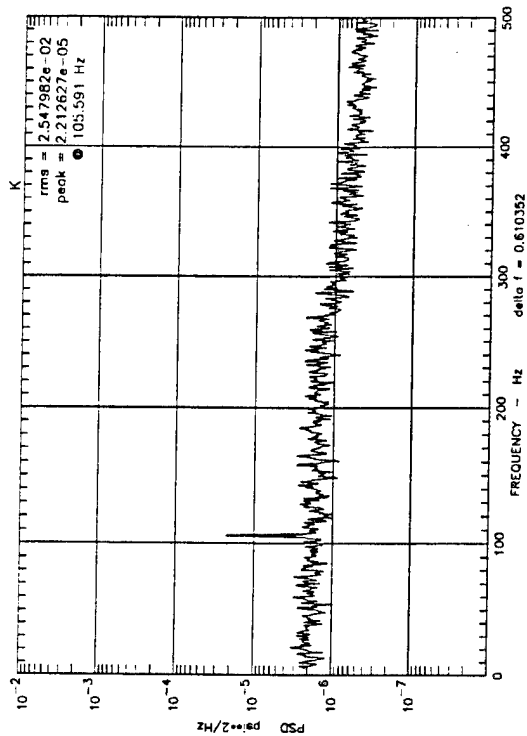
F 15 TPN\_2992: q=56 alpha=16 beta=-4 bp=65g



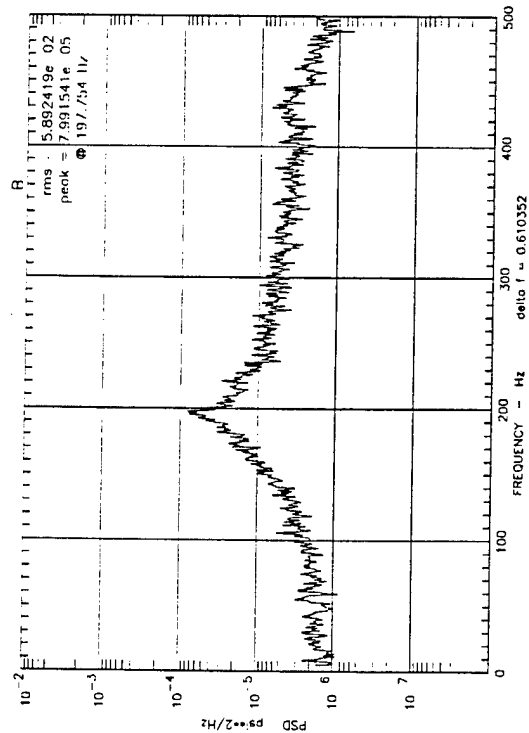
F 15 TPN\_2992: q=56 alpha=16 beta=-4 bp=65g



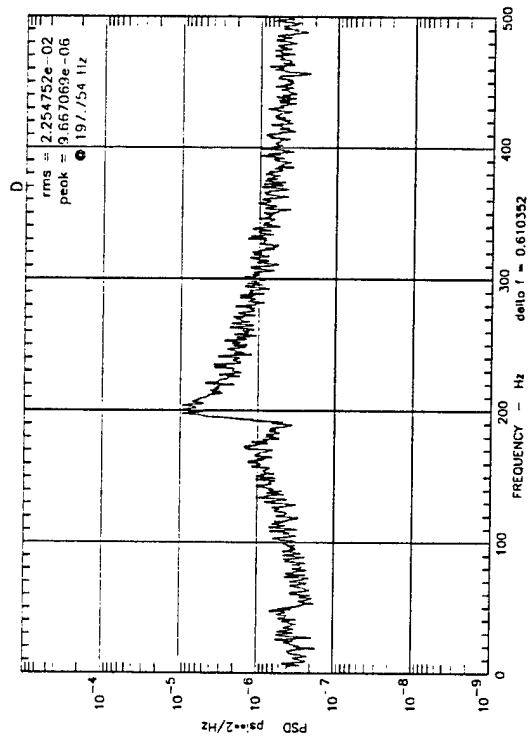
F 15 TPN\_2992: q=56 alpha=16 beta=-4 bp=65g



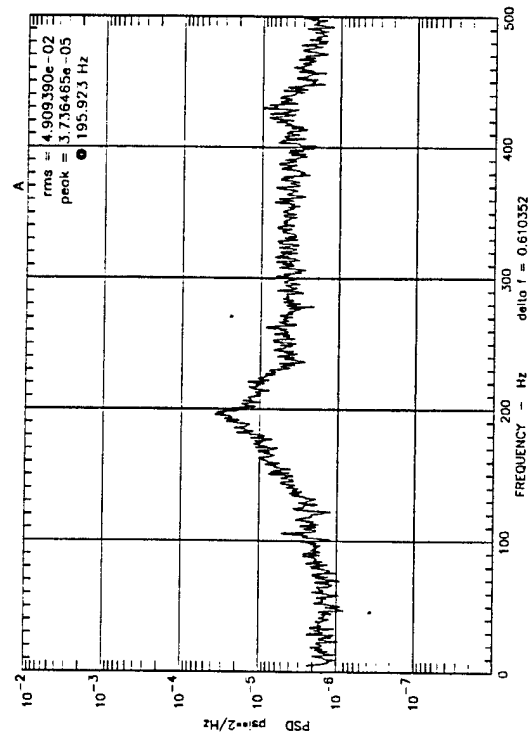
F-15 TPN\_2994: q=56 alpha=20 beta=-4 bp=65g



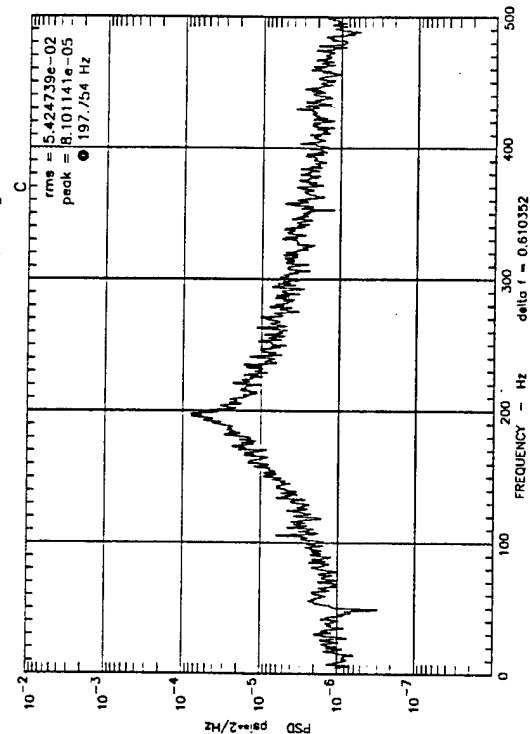
F-15 TPN\_2994: q=56 alpha=20 beta=-4 bp=65g



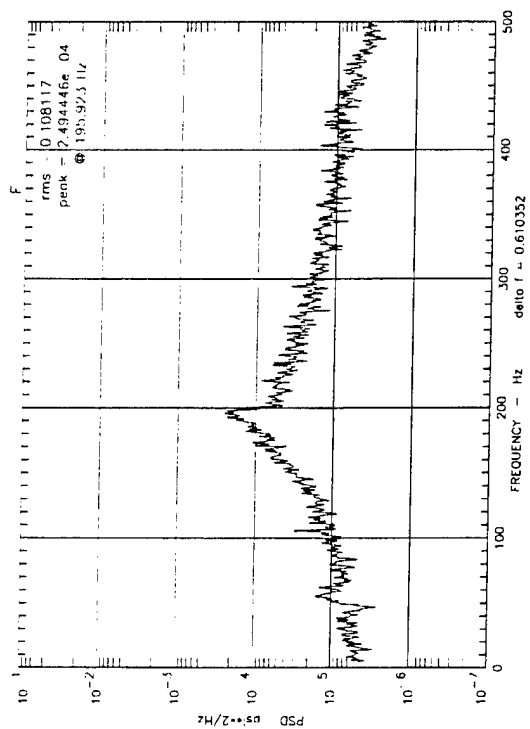
F-15 TPN\_2994: q=56 alpha=20 beta=-4 bp=65g



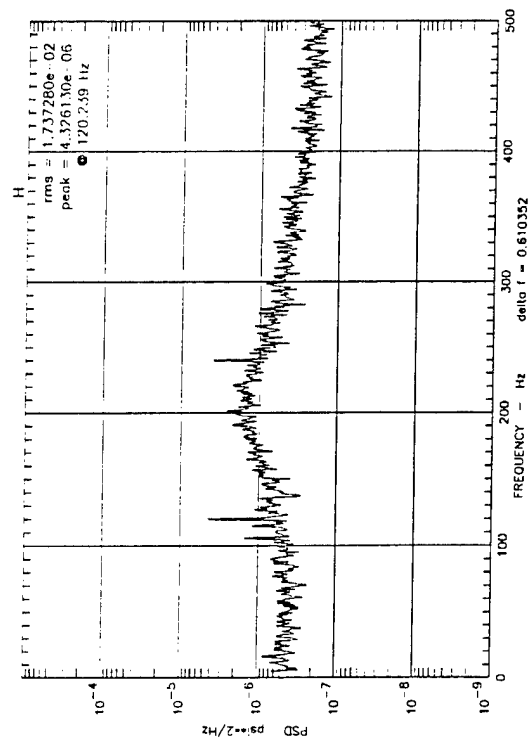
F-15 TPN\_2994: q=56 alpha=20 beta=-4 bp=65g



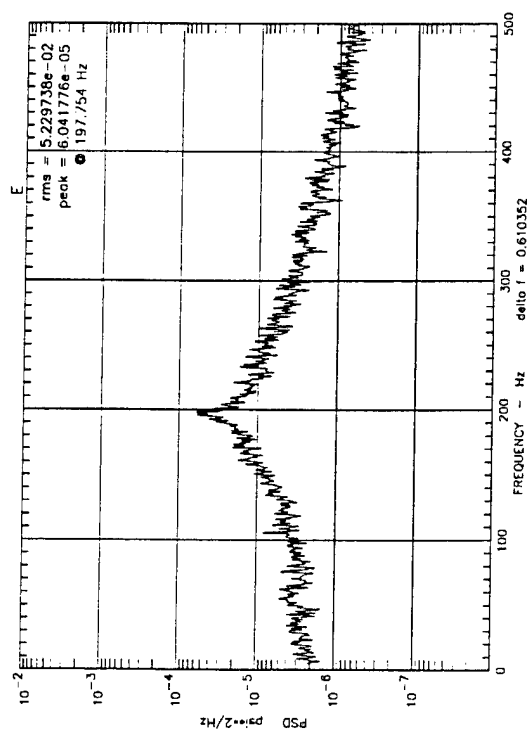
F 15 TPN\_2994: q=56 alpha=20 beta=-4 bp=65g



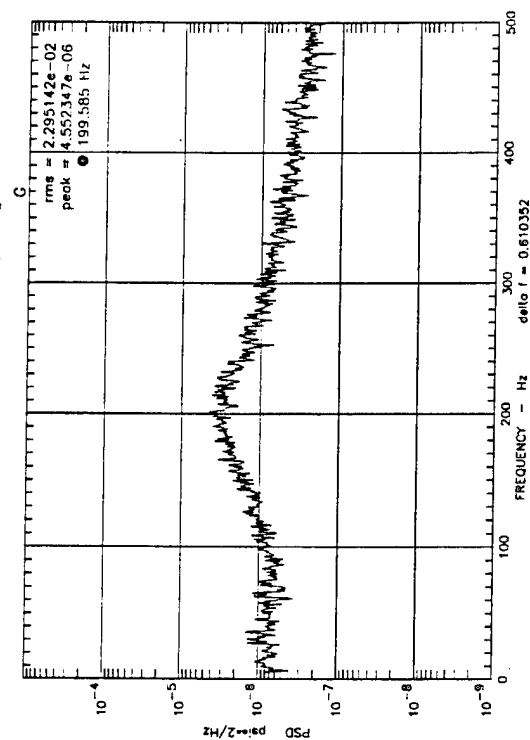
F 15 TPN\_2994: q=56 alpha=20 beta=-4 bp=65g



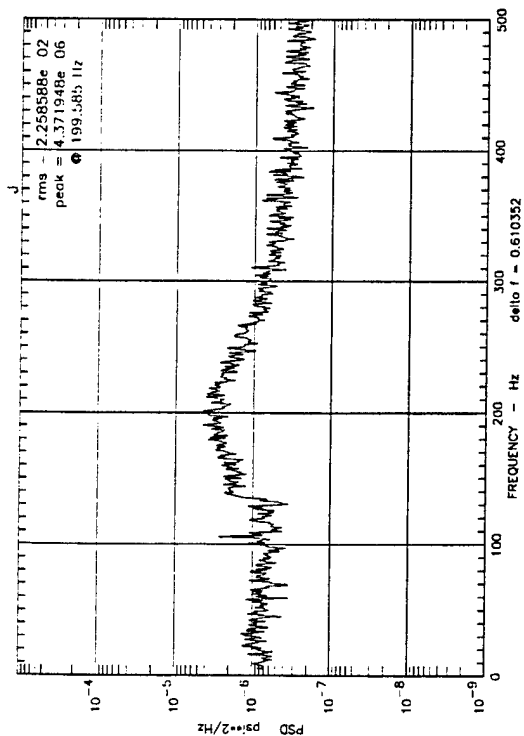
F 15 TPN\_2994: q=56 alpha=20 beta=-4 bp=65g



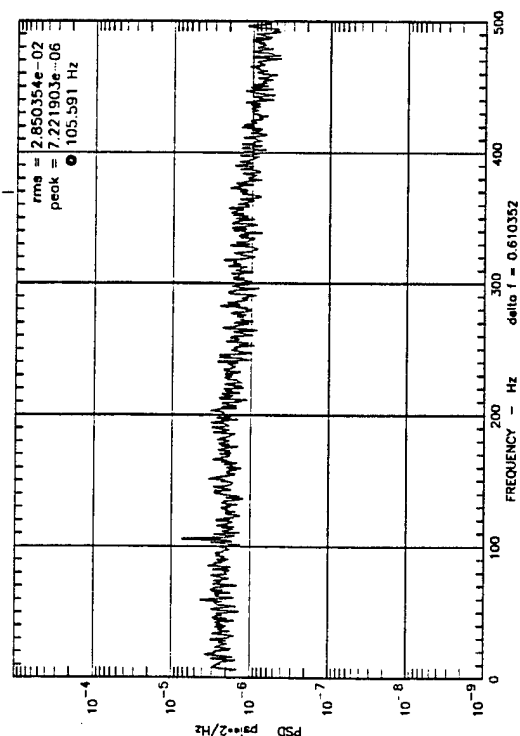
F 15 TPN\_2994: q=56 alpha=20 beta=-4 bp=65g



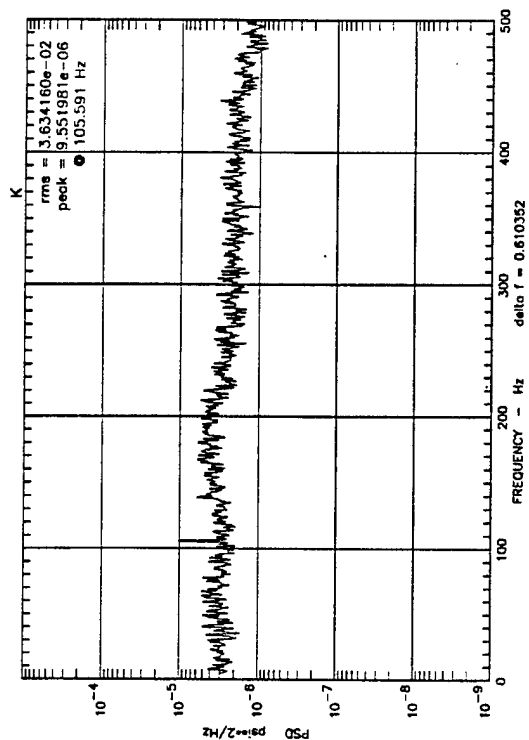
F 15 TPN\_2994: q=56 alpha=20 beta=-4 bp=65g



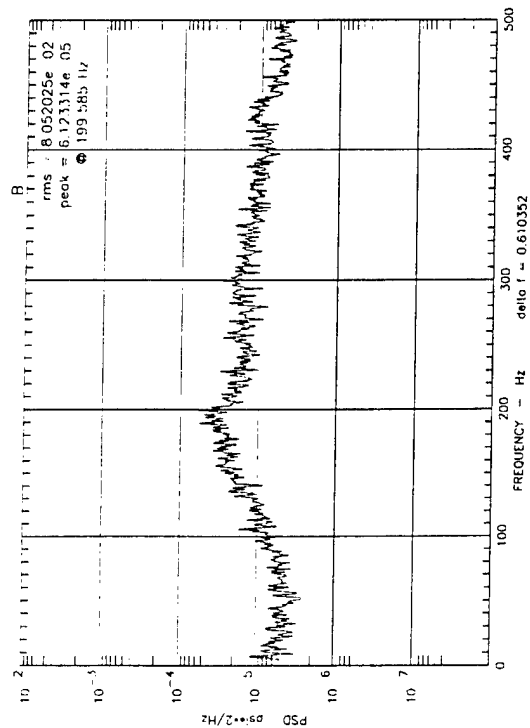
F 15 TPN\_2994: q=56 alpha=20 beta=-4 bp=65g



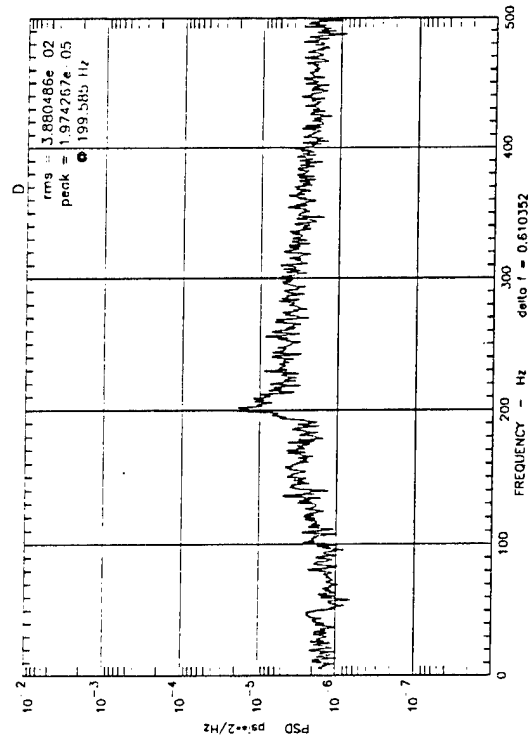
F 15 TPN\_2994: q=56 alpha=20 beta=-4 bp=65g



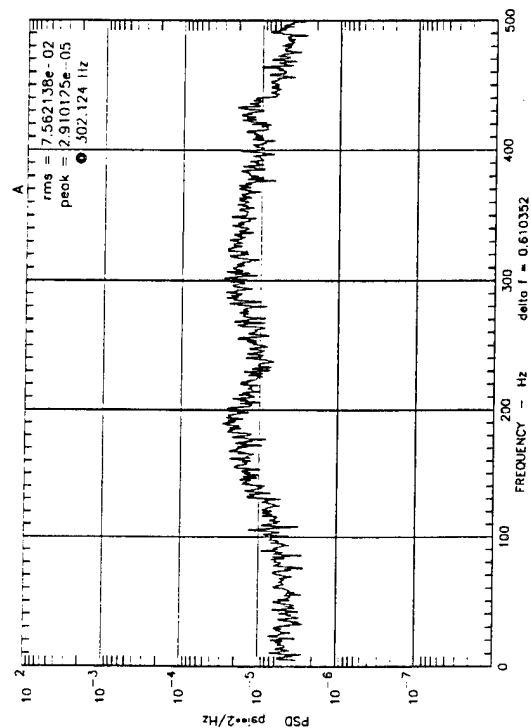
F 15 TPN 2996: q=56 alpha=24 beta=-4 bp=65g



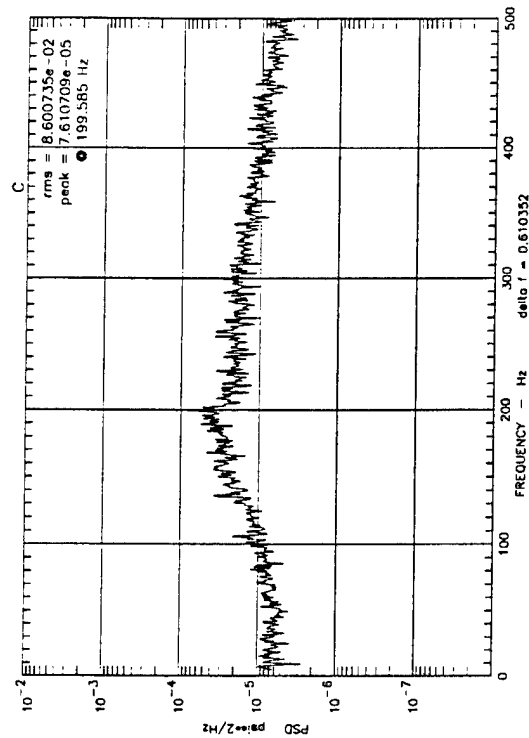
F 15 TPN 2996: q=56 alpha=24 beta=-4 bp=65g



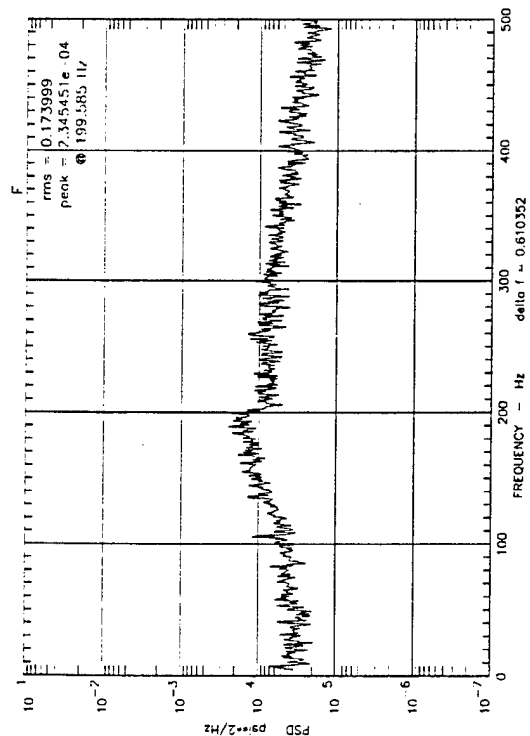
F 15 TPN 2996: q=56 alpha=24 beta=-4 bp=65g



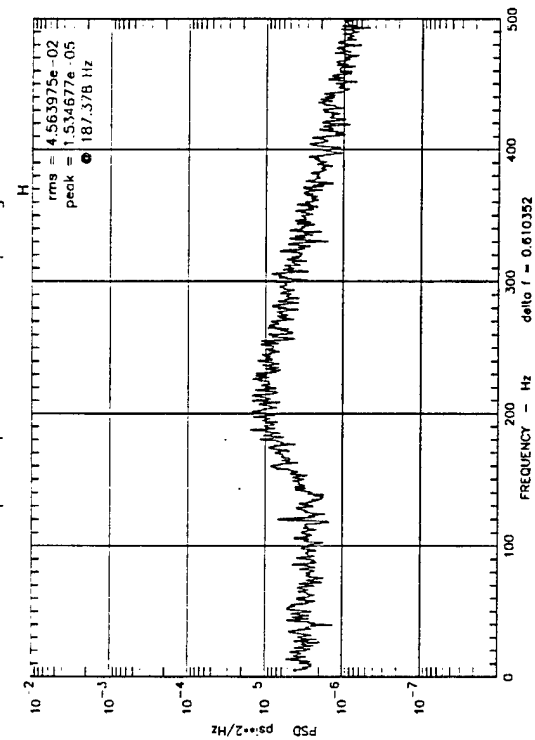
F 15 TPN 2996: q=56 alpha=24 beta=-4 bp=65g



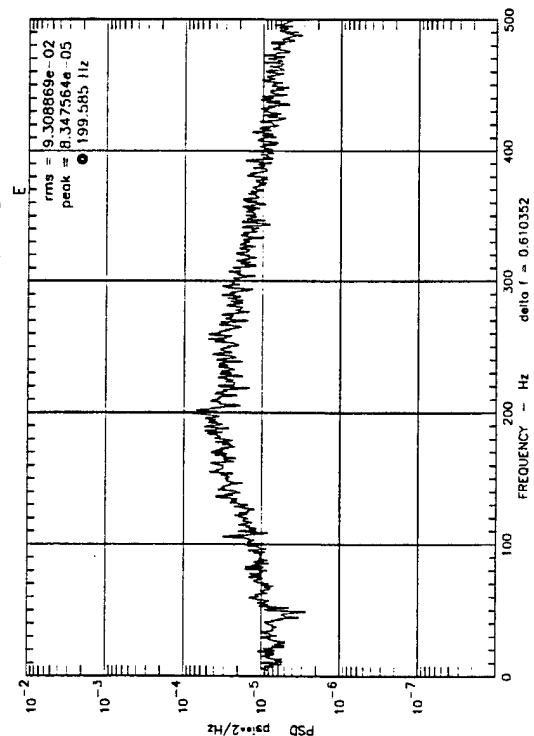
F-15 TPN\_2996: q=56 alpha=24 beta=-4 bp=65g



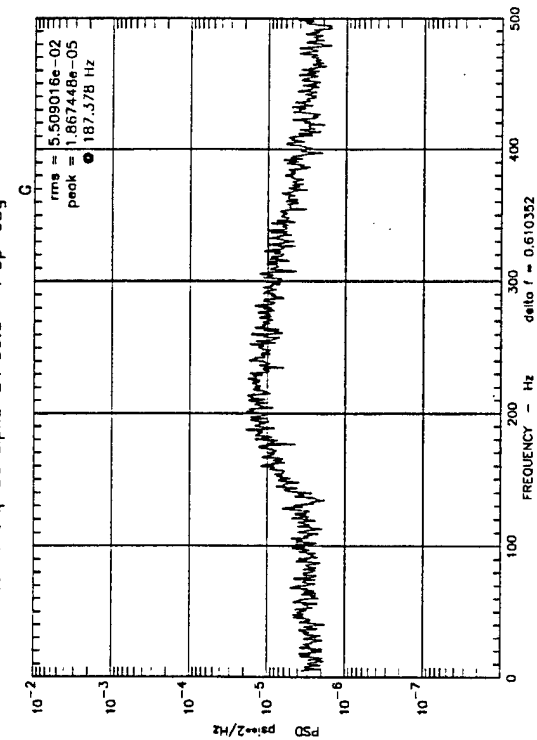
F-15 TPN\_2996: q=56 alpha=24 beta=-4 bp=65g



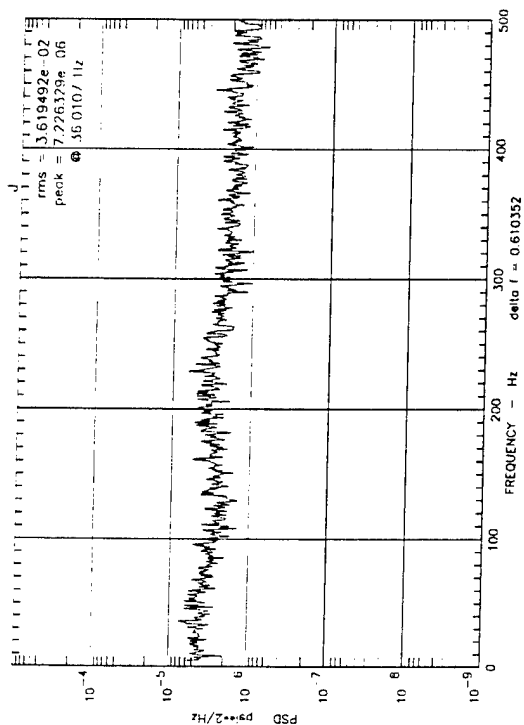
F-15 TPN\_2996: q=56 alpha=24 beta=-4 bp=65g



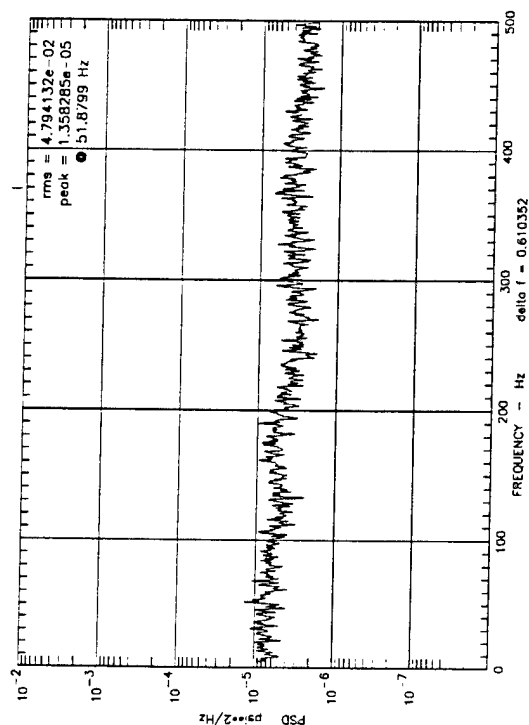
F-15 TPN\_2996: q=56 alpha=24 beta=-4 bp=65g



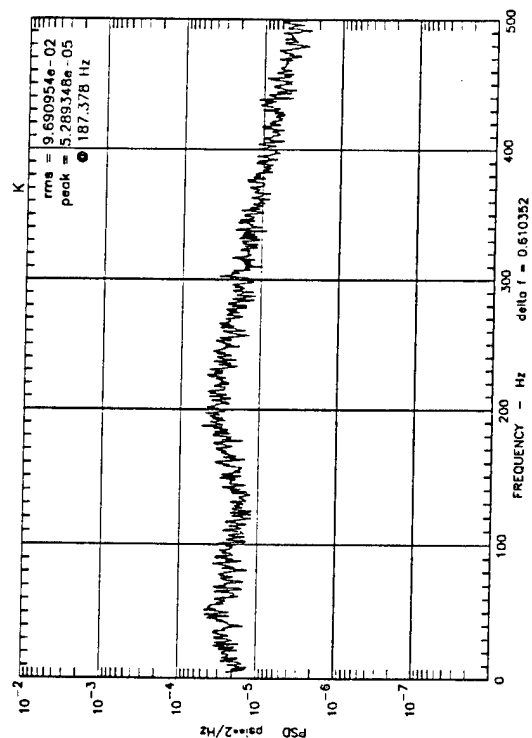
F 15 TPN 2996: q=56 alpha=24 beta=-4 bp=65g



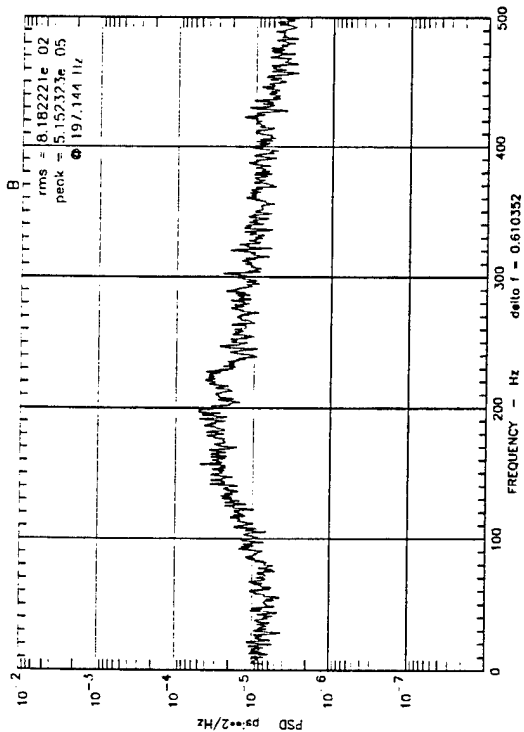
F-15 TPN.2996: q=56 alpha=24 beta=-4 bp=65g



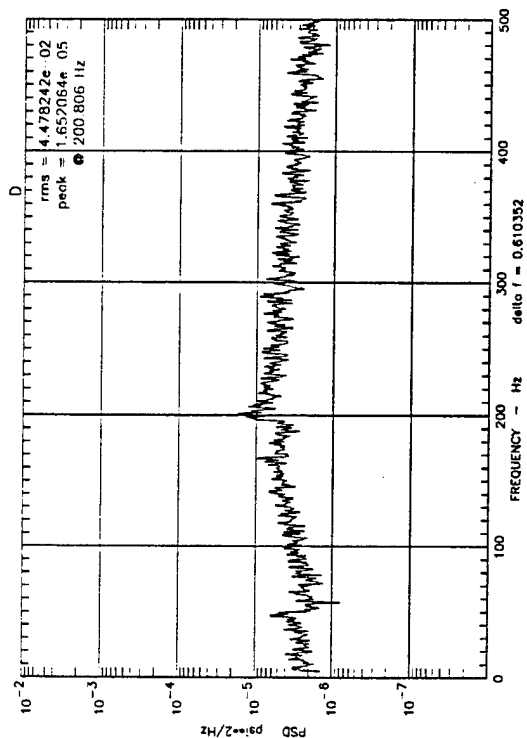
F-15 TPN.2996: q=56 alpha=24 beta=-4 bp=65g



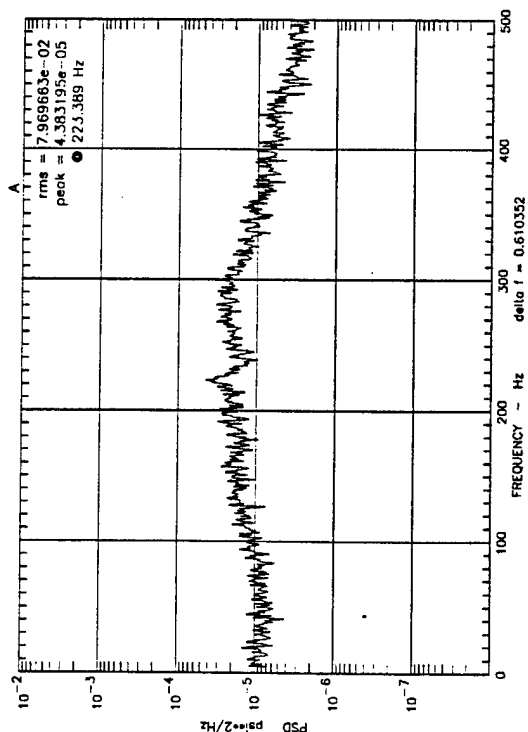
F-15 TPN\_2997: q=56 alpha=26 beta=-4 bp=65g



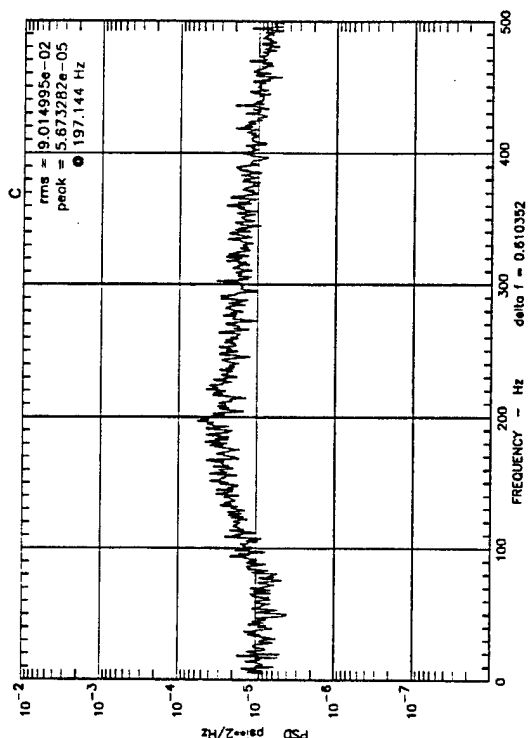
F-15 TPN\_2997: q=56 alpha=26 beta=-4 bp=65g



F-15 TPN\_2997: q=56 alpha=26 beta=-4 bp=65g

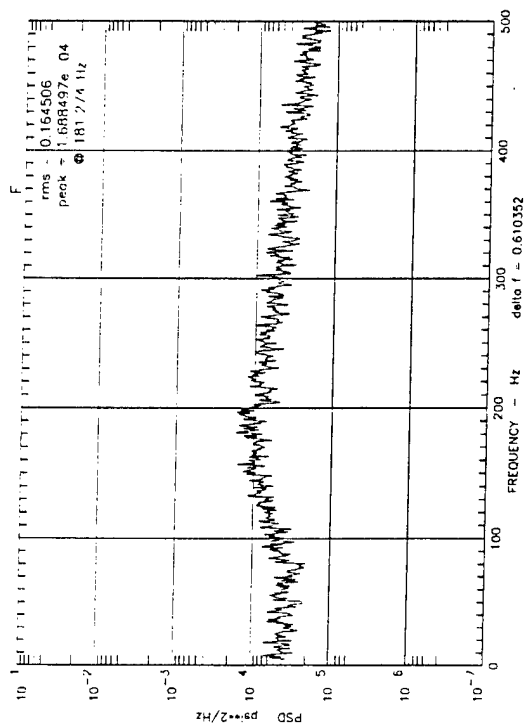


F-15 TPN\_2997: q=56 alpha=26 beta=-4 bp=65g

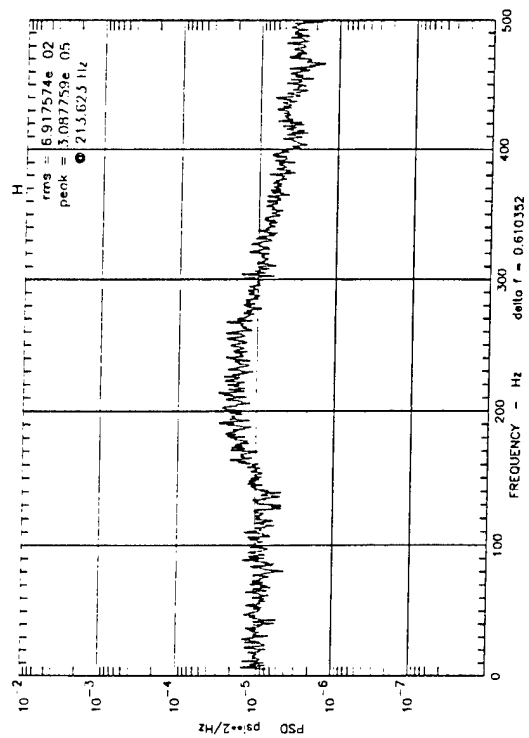




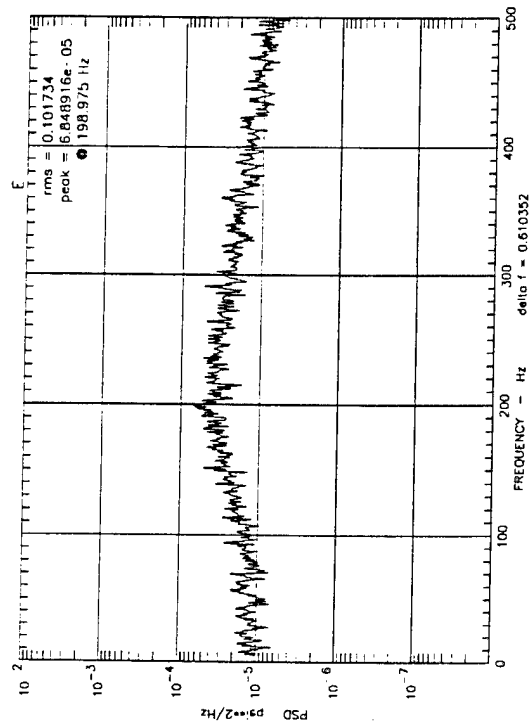
F 15 TPN 2997: q=56 alpha=26 beta=-4 bp=65g



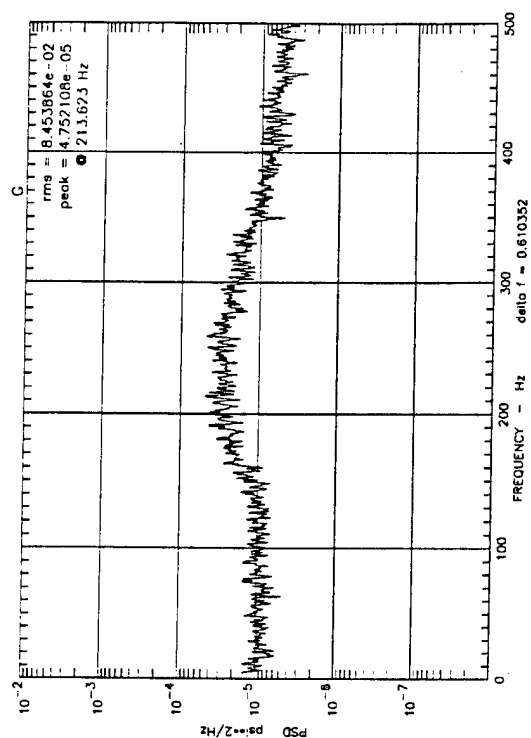
F 15 TPN 2997: q=56 alpha=26 beta=-4 bp=65g



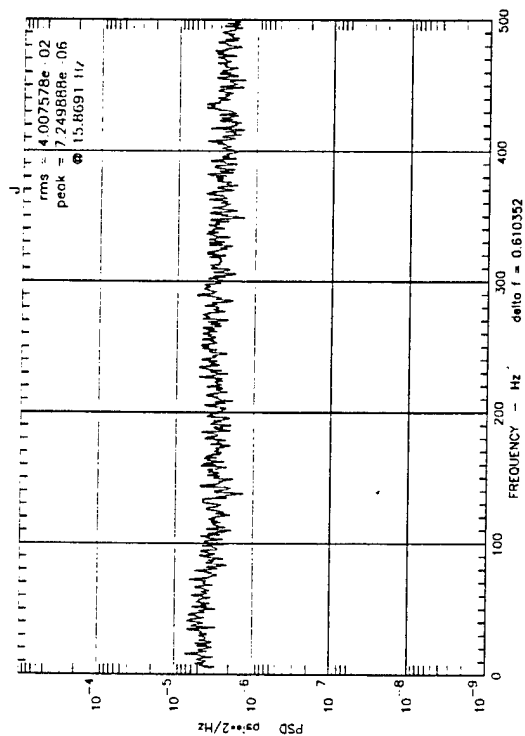
F 15 TPN 2997: q=56 alpha=26 beta=-4 bp=65g



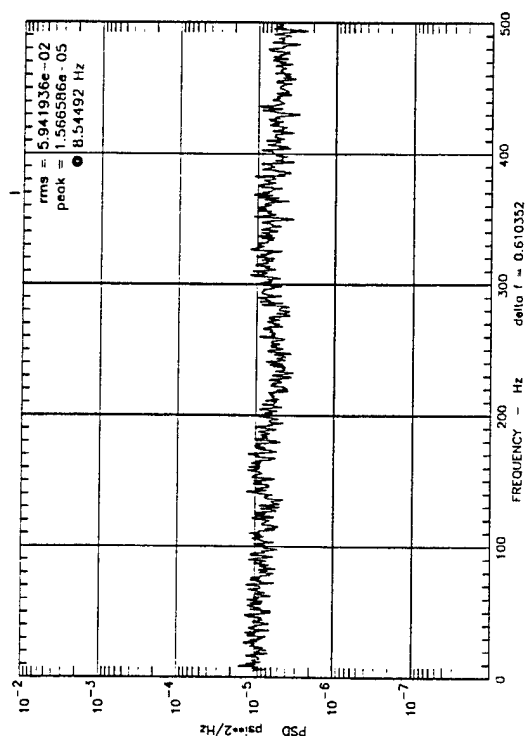
F 15 TPN 2997: q=56 alpha=26 beta=-4 bp=65g



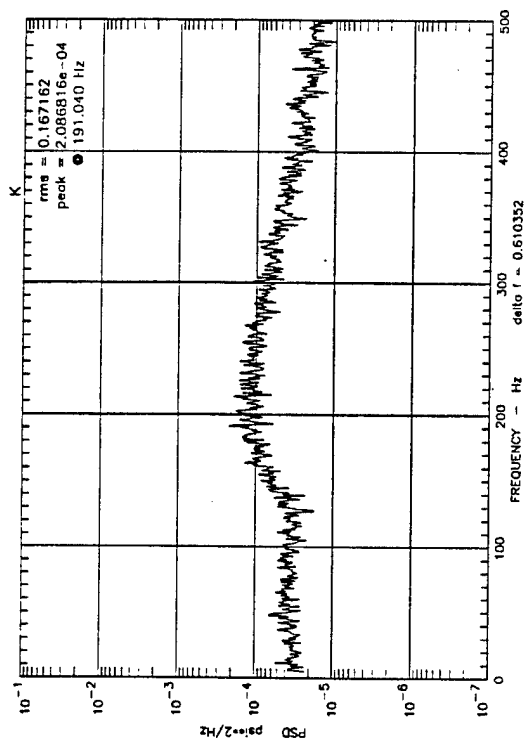
F-15 TPN\_2997: q=56 alpha=26 beta=-4 bp=65g



F-15 TPN\_2997: q=56 alpha=26 beta=-4 bp=65g



F-15 TPN\_2997: q=56 alpha=26 beta=-4 bp=65g

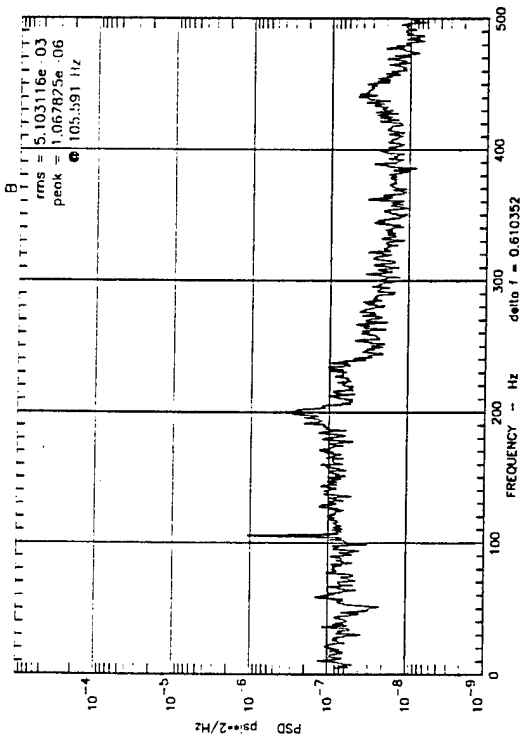


**PRESSURE PSD's**

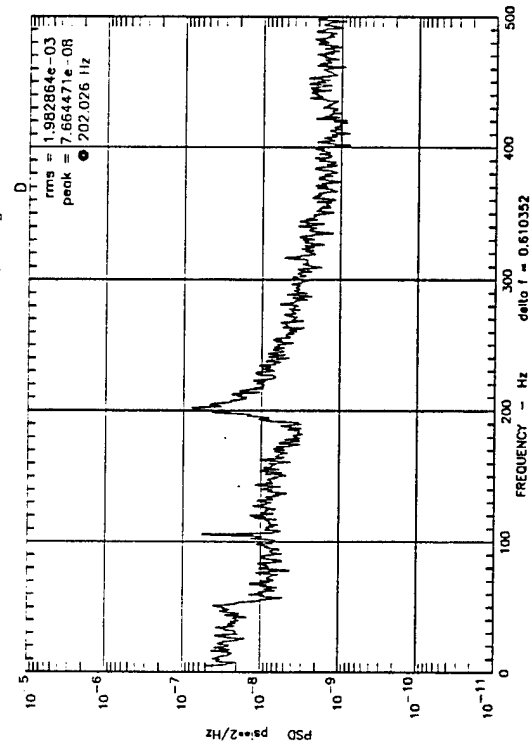
**Q=56 PSF**

**2.1.2.3 PSD GRAPHS( 5- 500 Hz), GBP = 65 PSI, WBP = 65 PSI Beta = 0, +4, -4  
Deg, Alpha = 8...32 Deg**

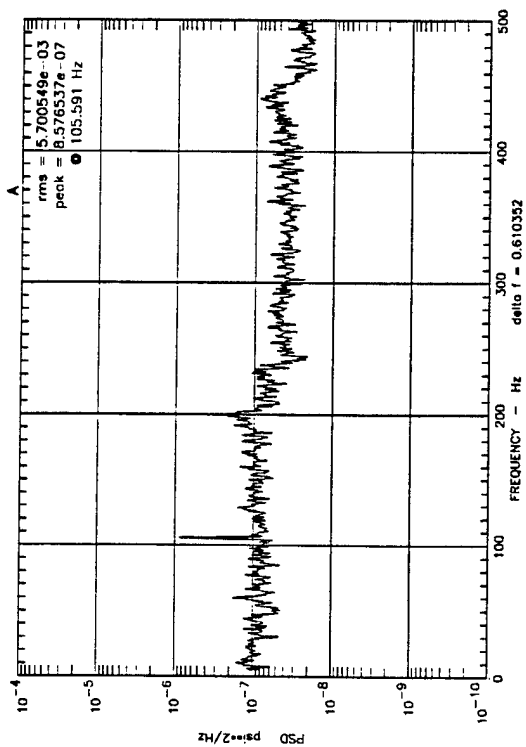
F-15 TPN\_3024: q=56 alpha=16 beta=4 bp=65g&w



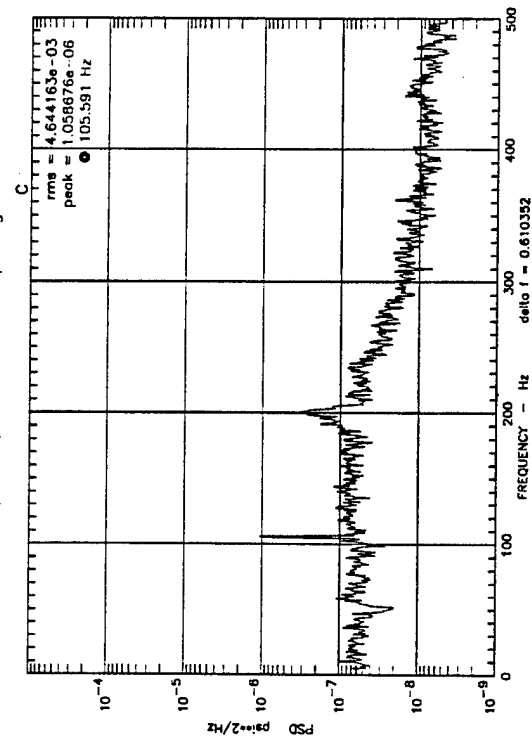
F-15 TPN\_3024: q=56 alpha=16 beta=4 bp=65g&w



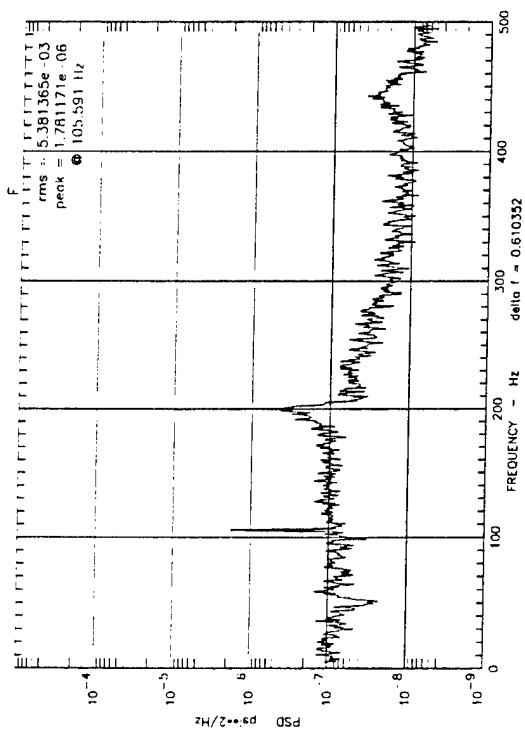
F-15 TPN\_3024: q=56 alpha=16 beta=4 bp=65g&w



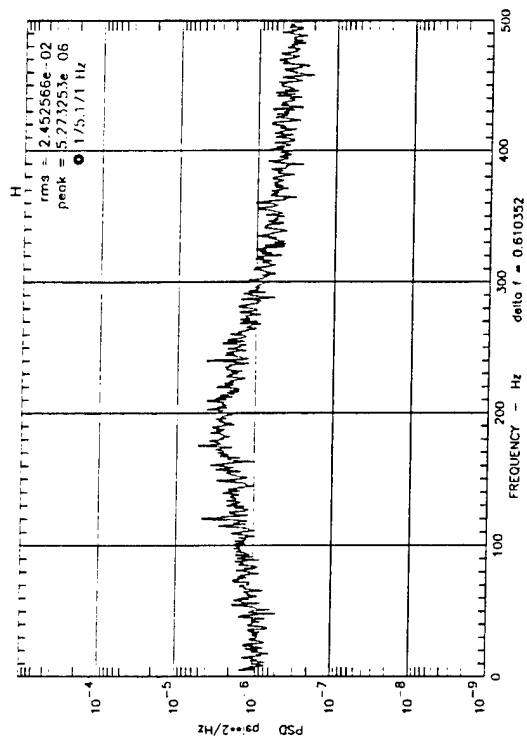
F-15 TPN\_3024: q=56 alpha=16 beta=4 bp=65g&w



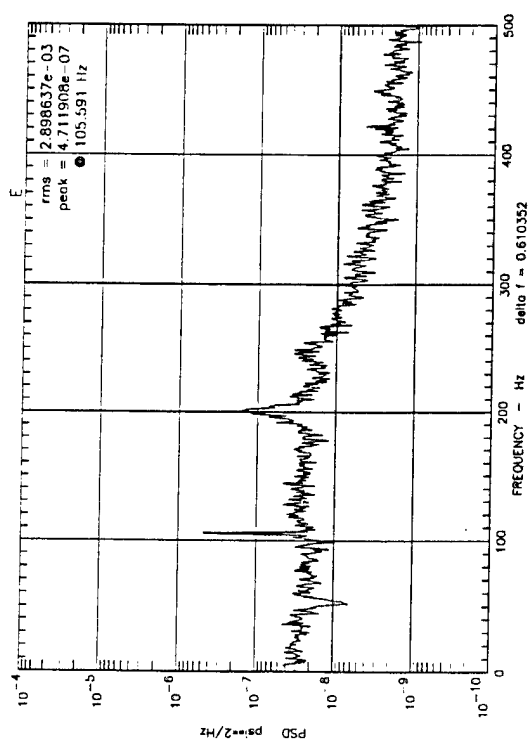
F-15 TPN\_3024: q=56 alpha=16 beta=4 bp=65g&w



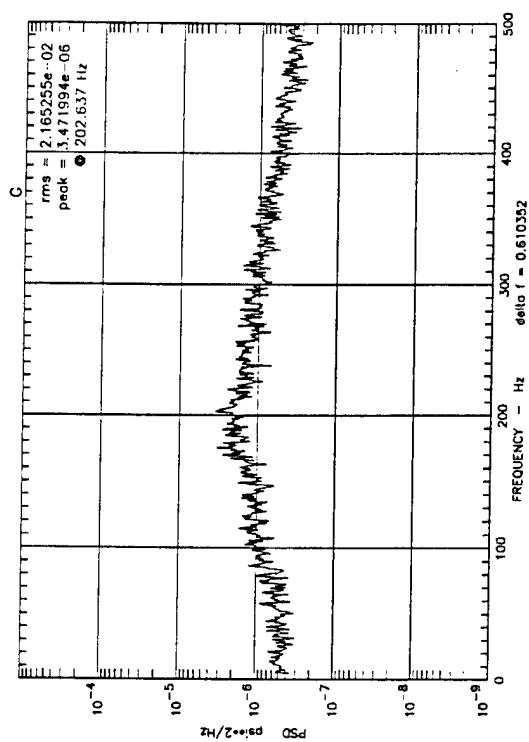
F-15 TPN\_3024: q=56 alpha=16 beta=4 bp=65g&w

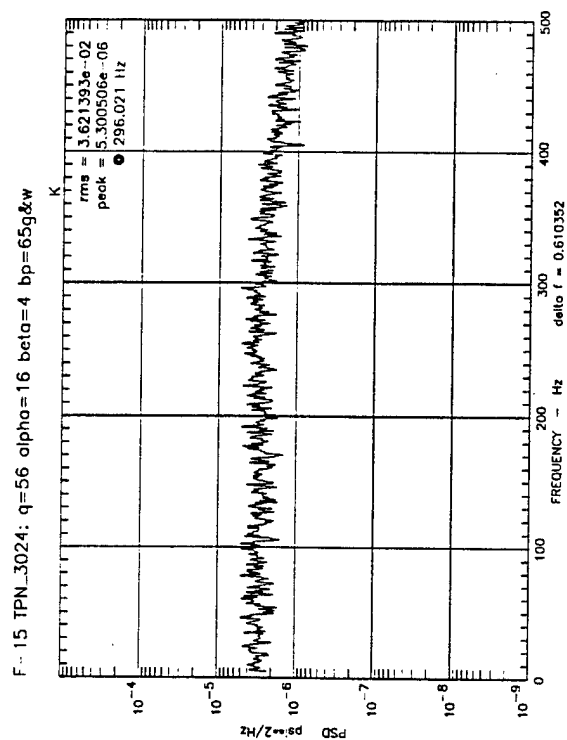
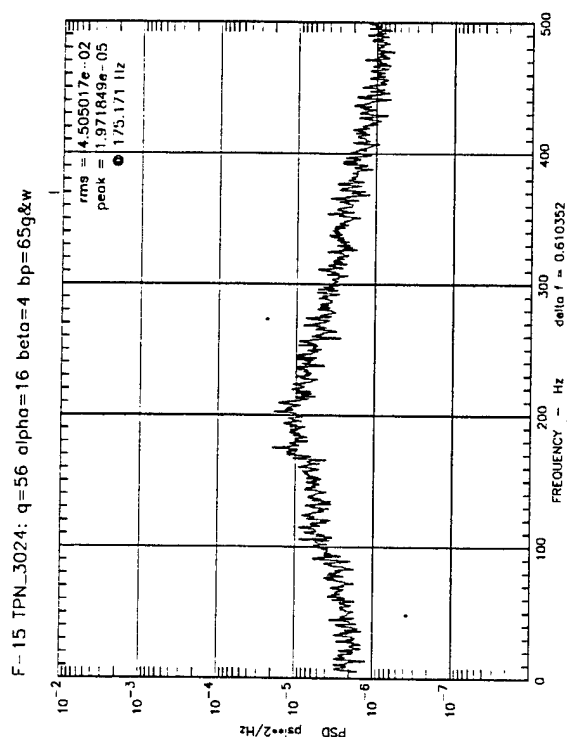
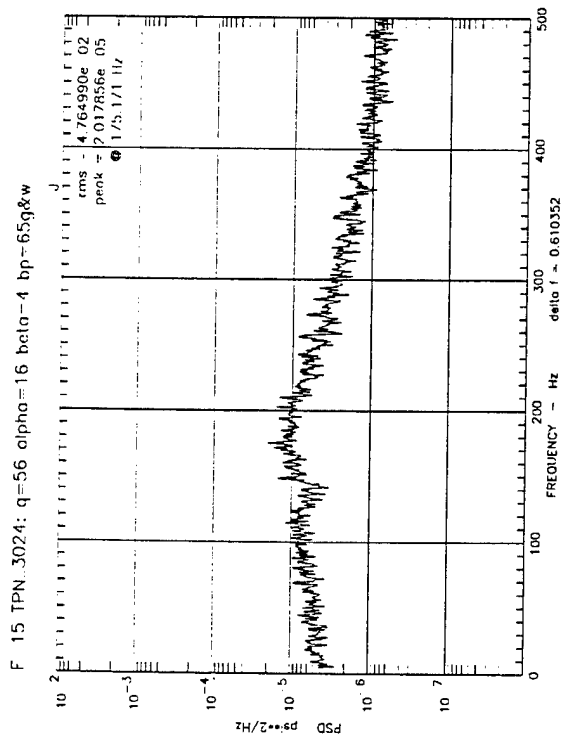


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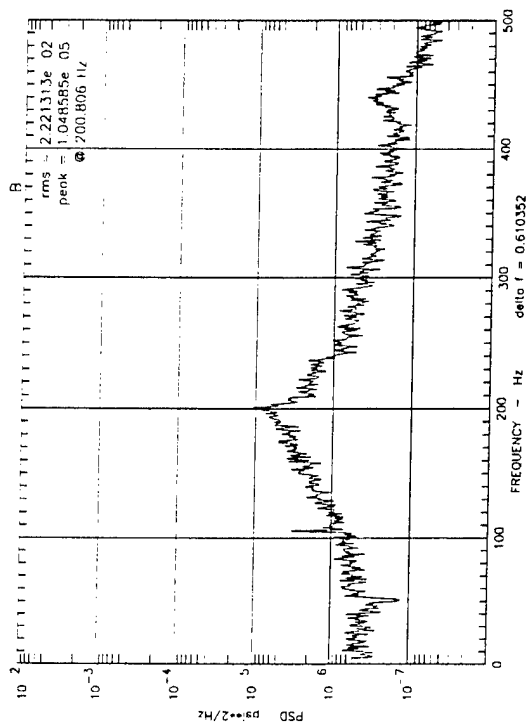


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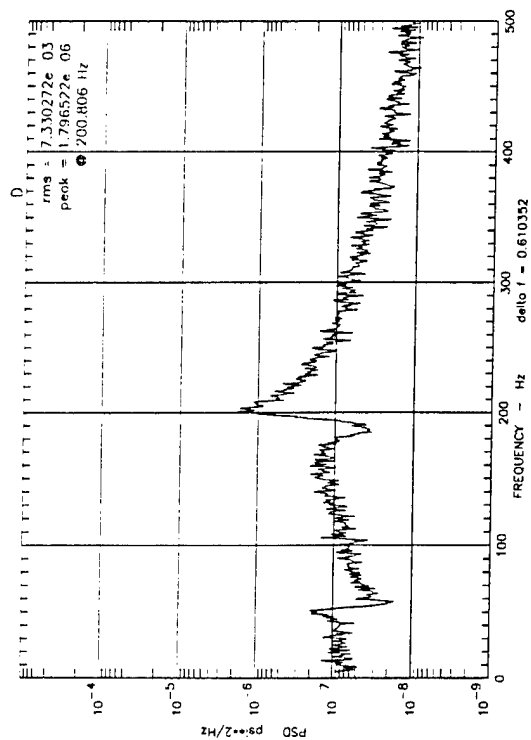




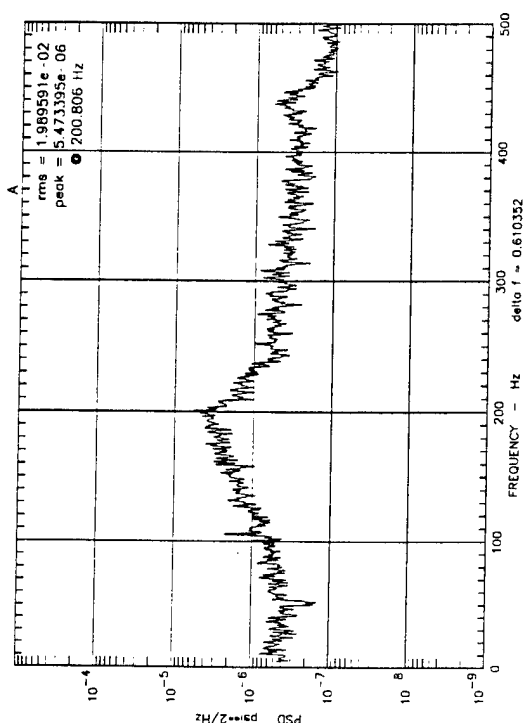
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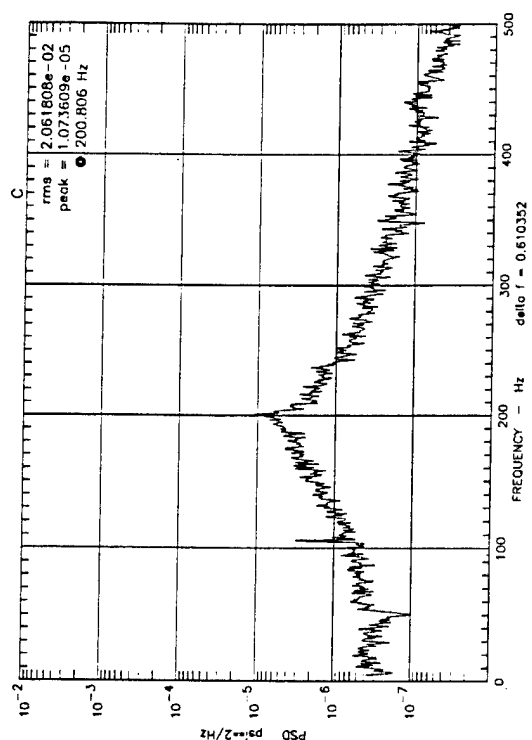
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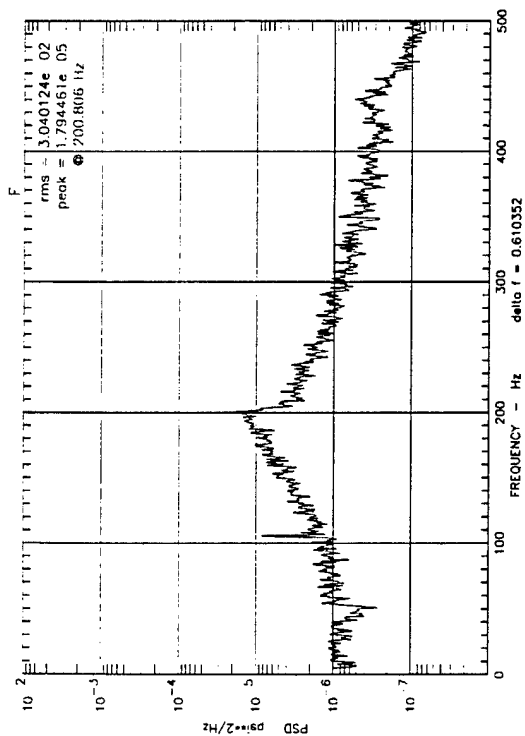
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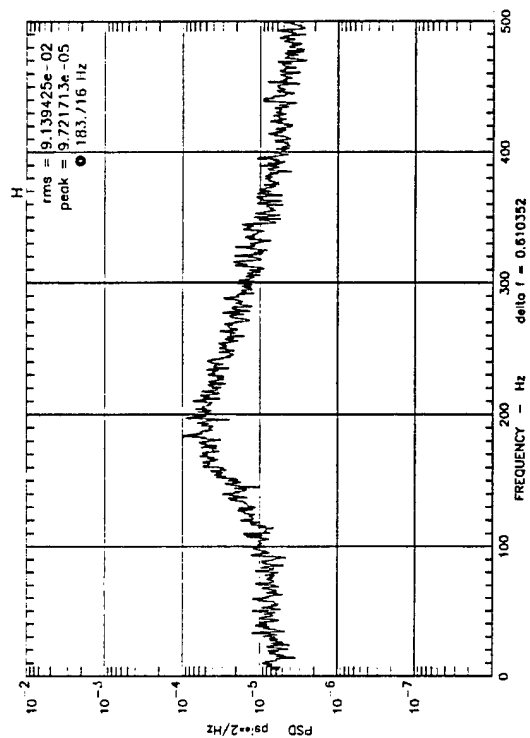
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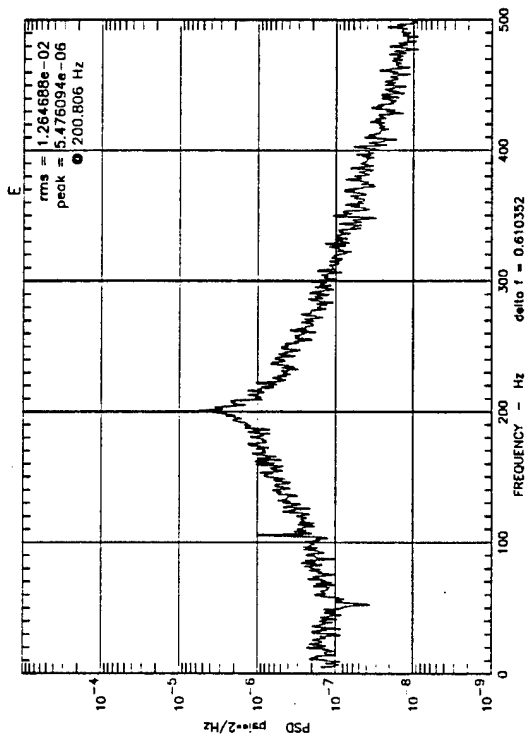
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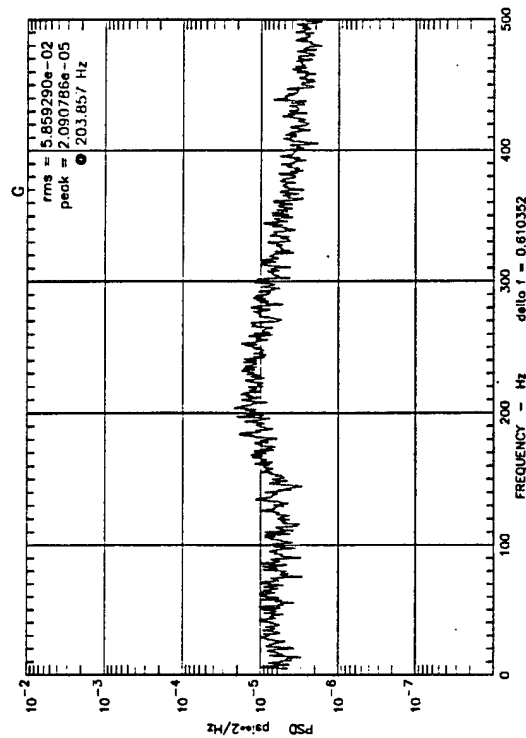
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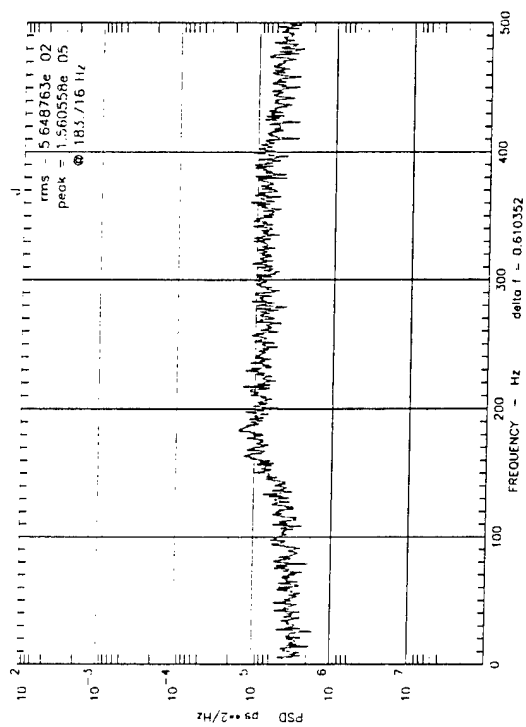


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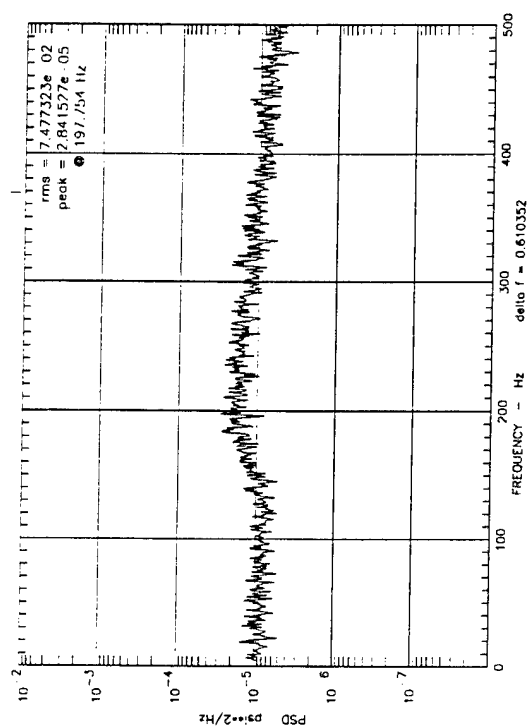




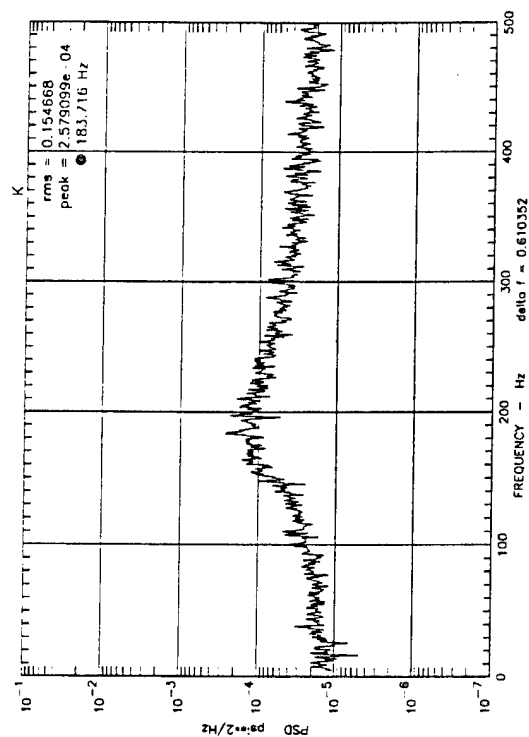
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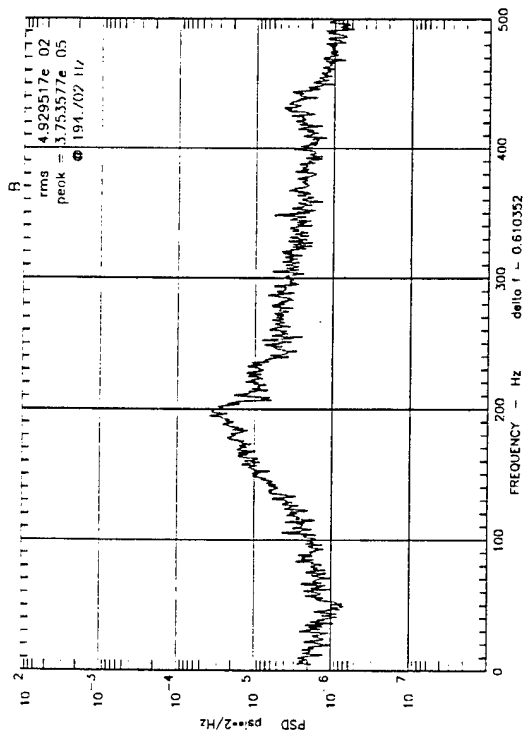
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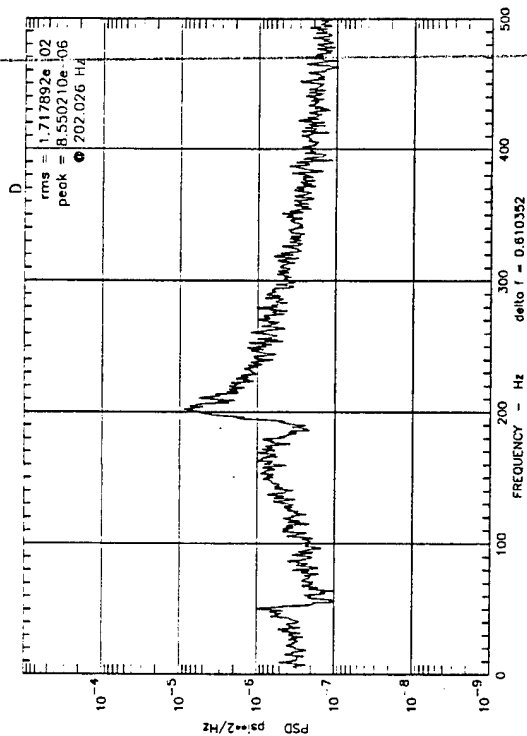
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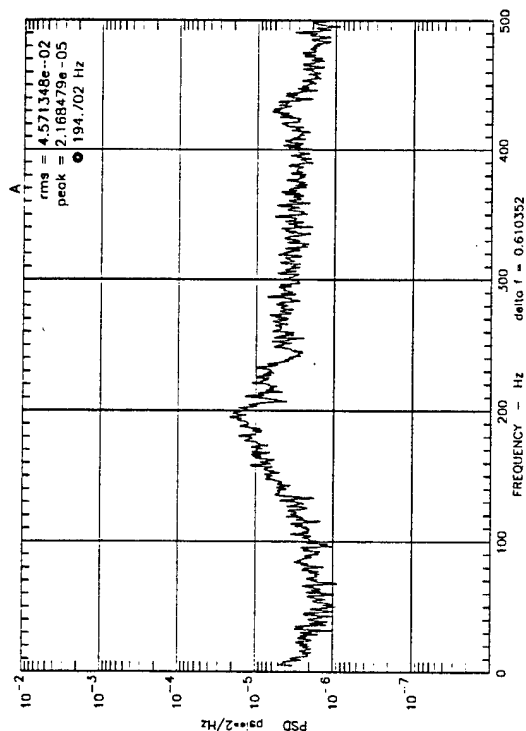
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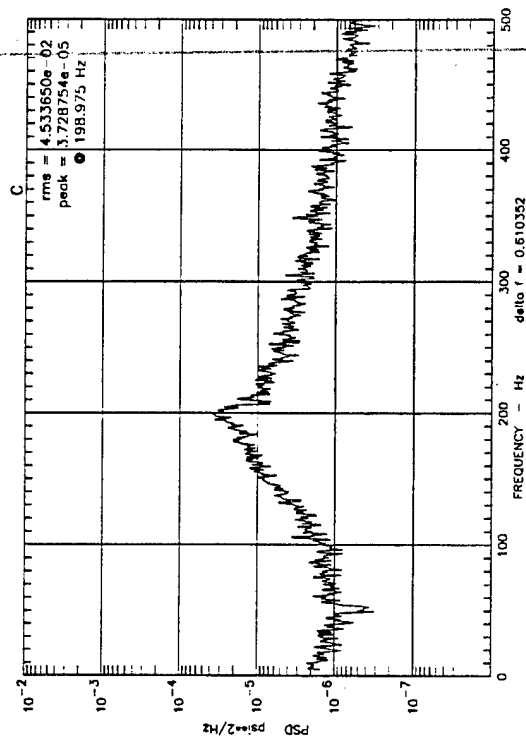
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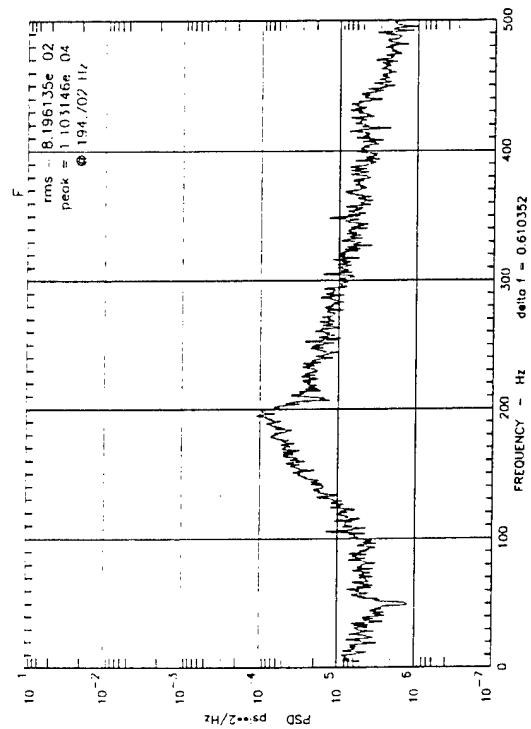
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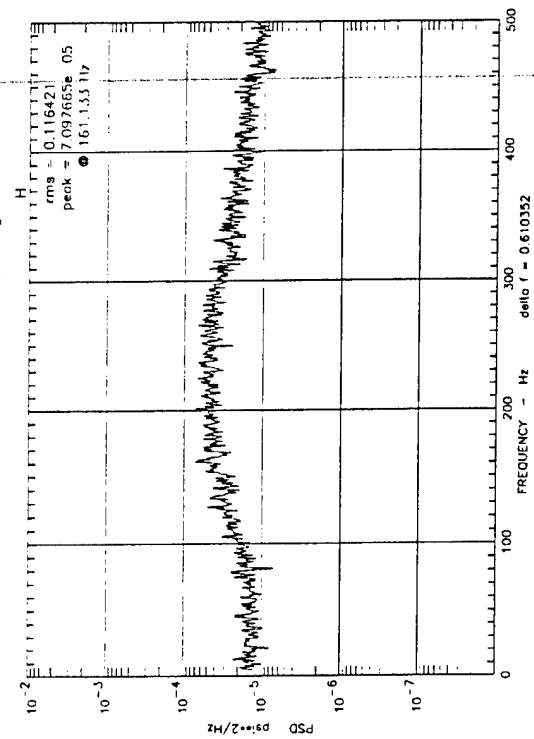
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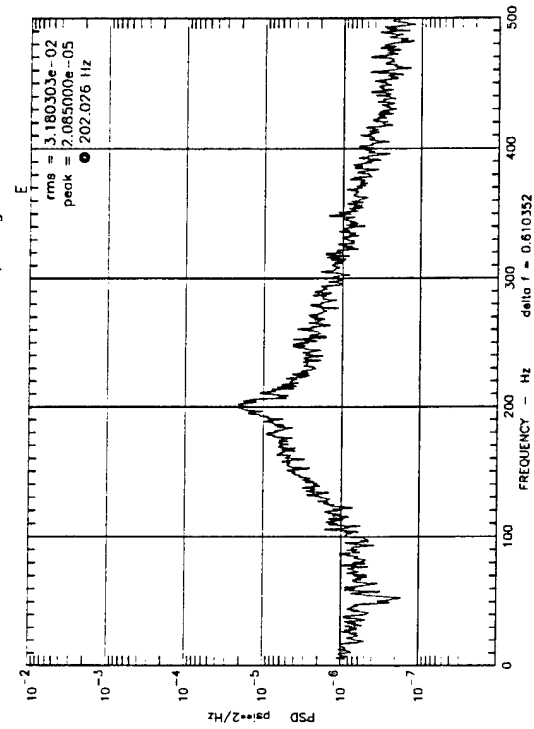
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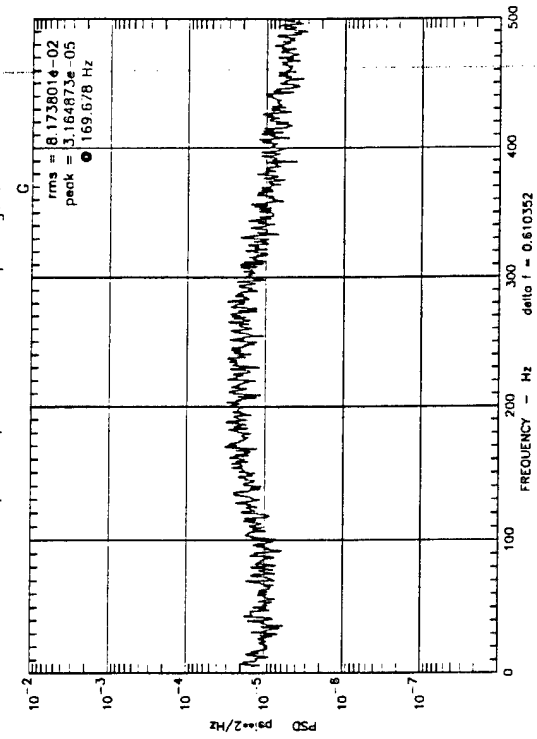
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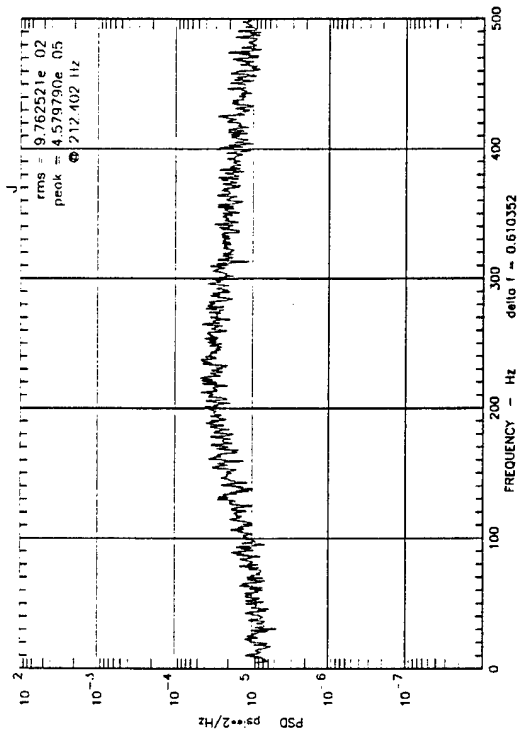
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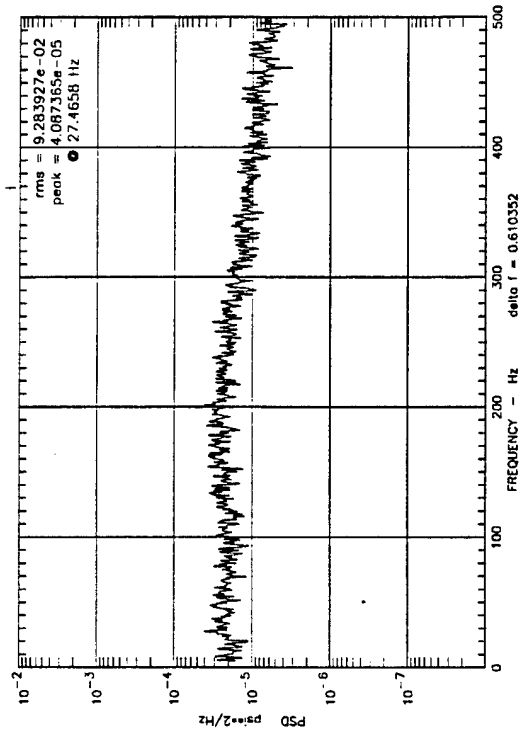
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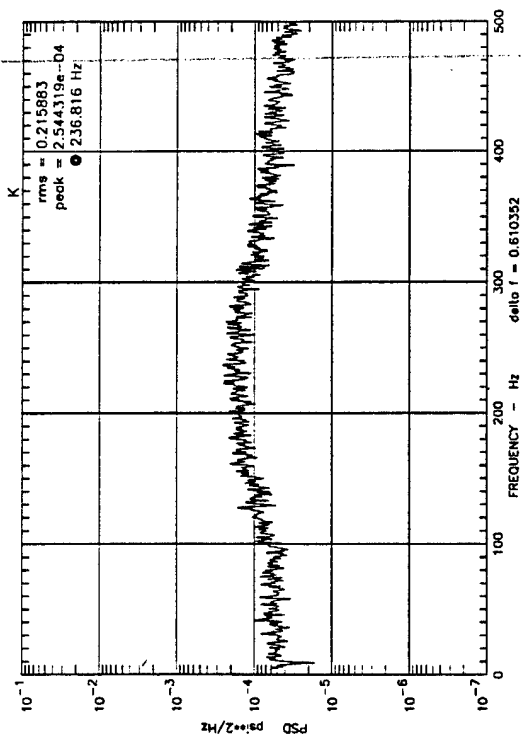
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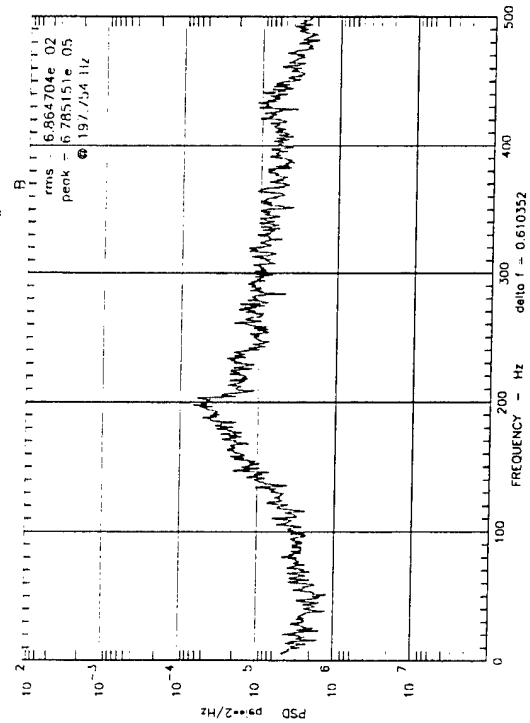
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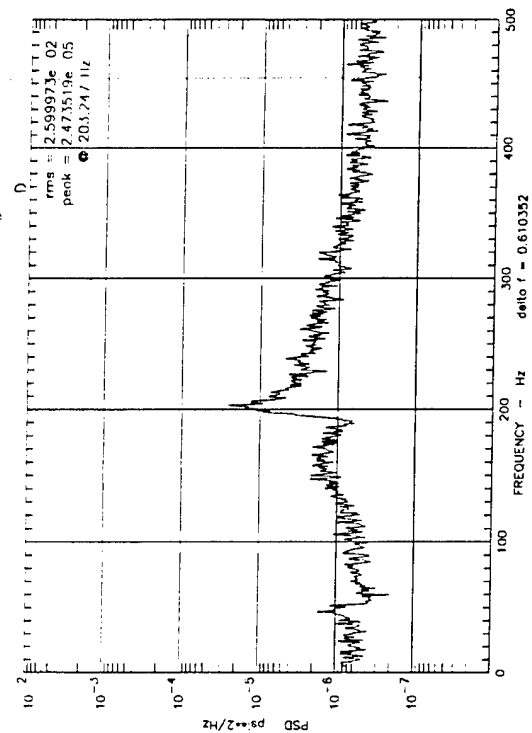
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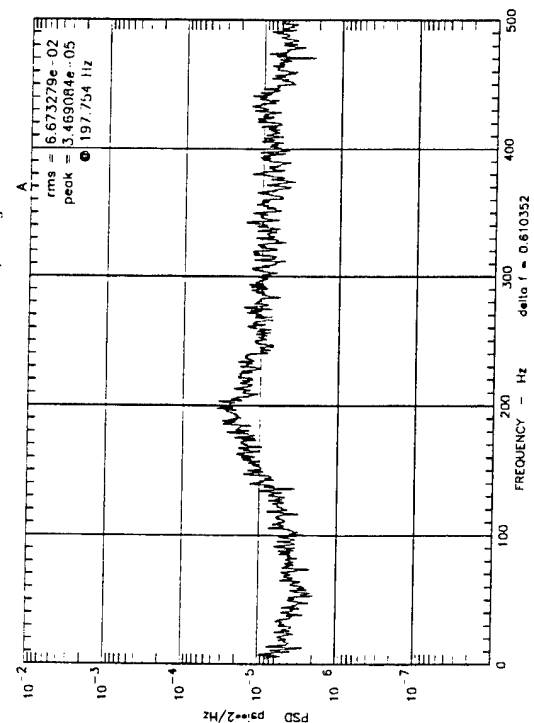
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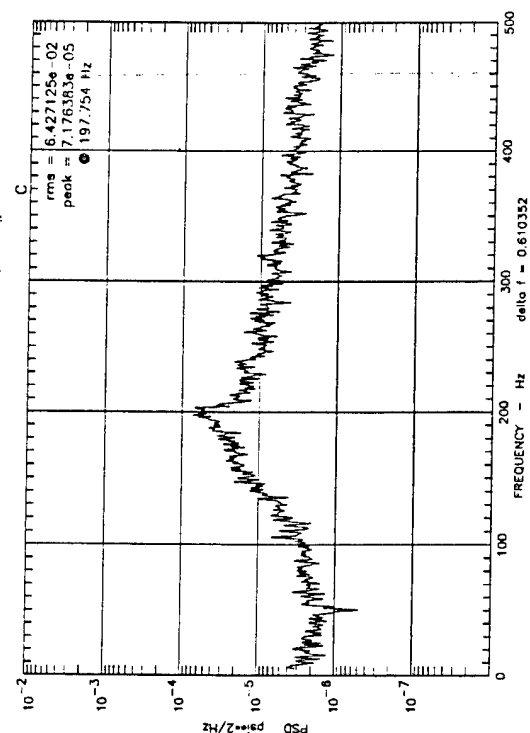
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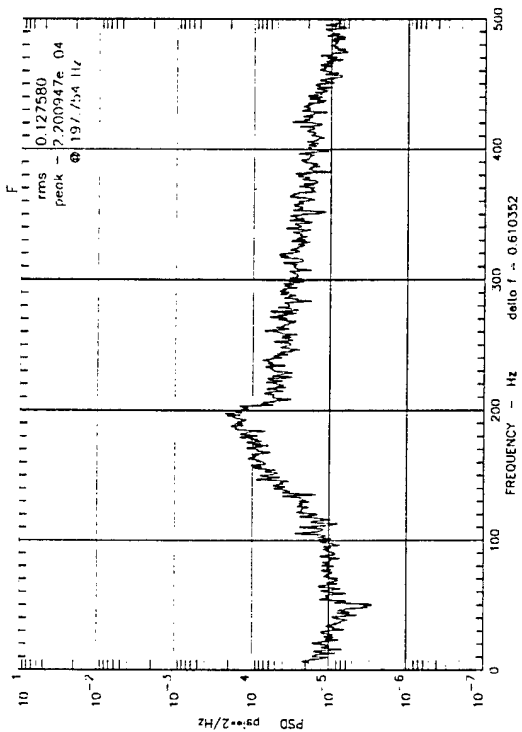
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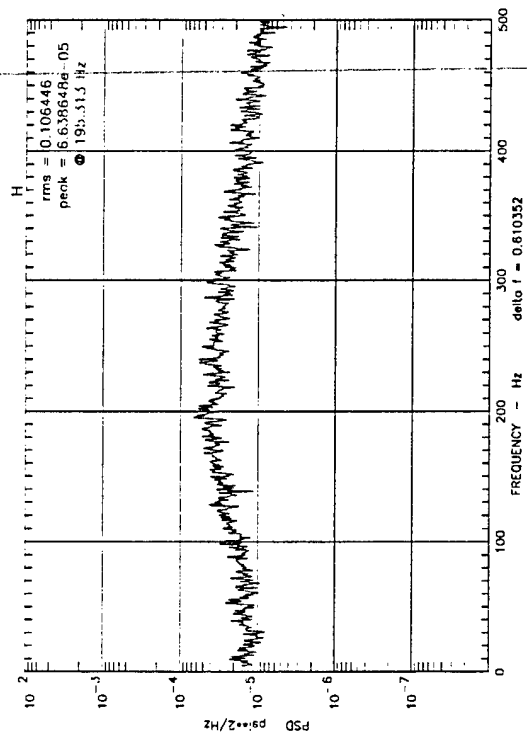
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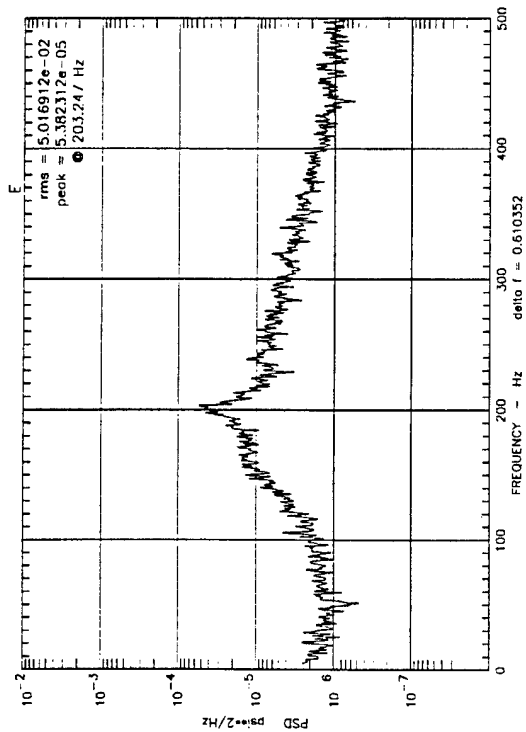
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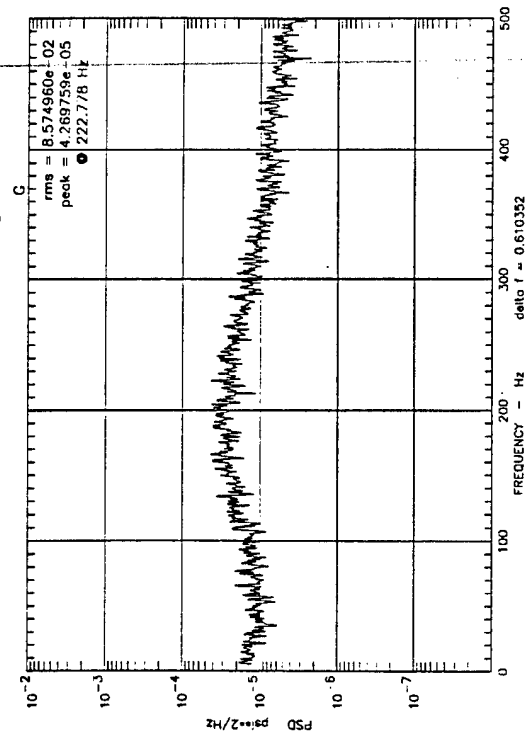
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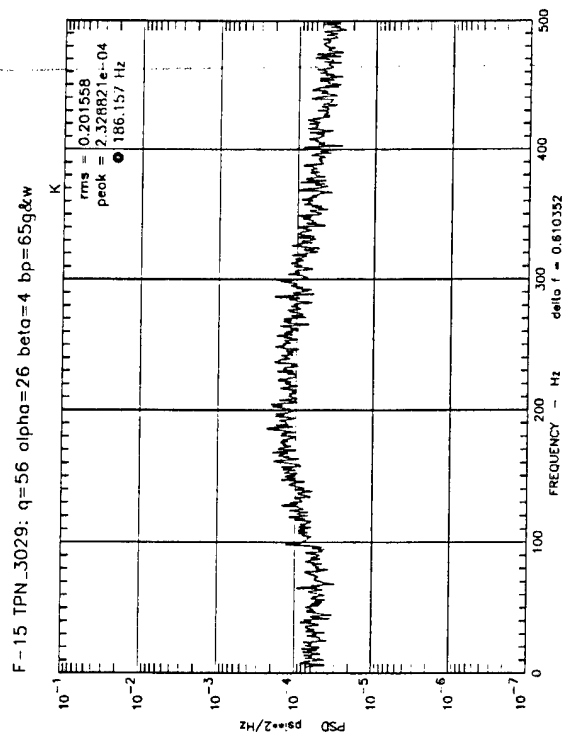
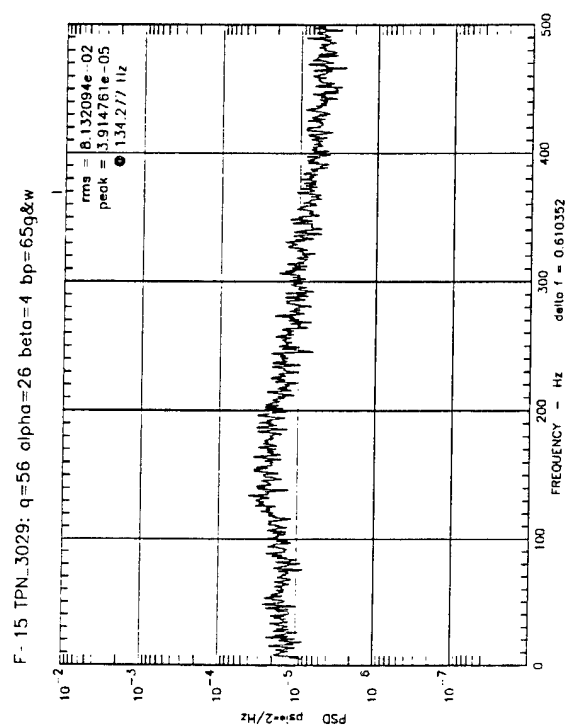
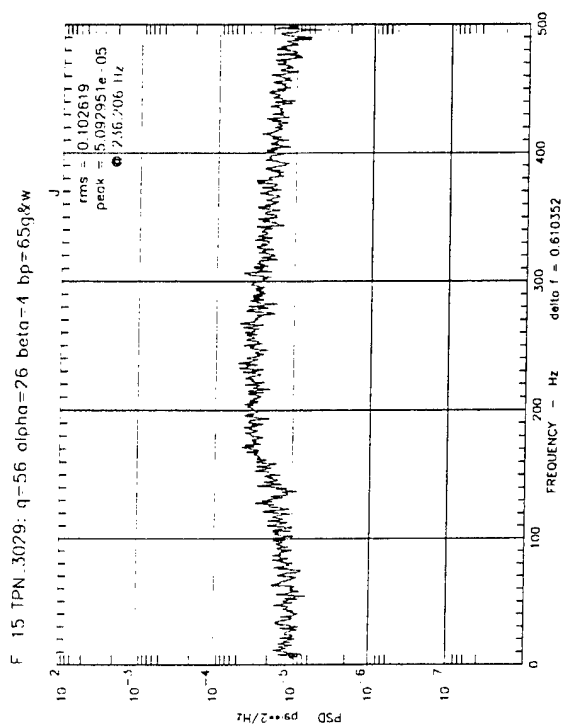


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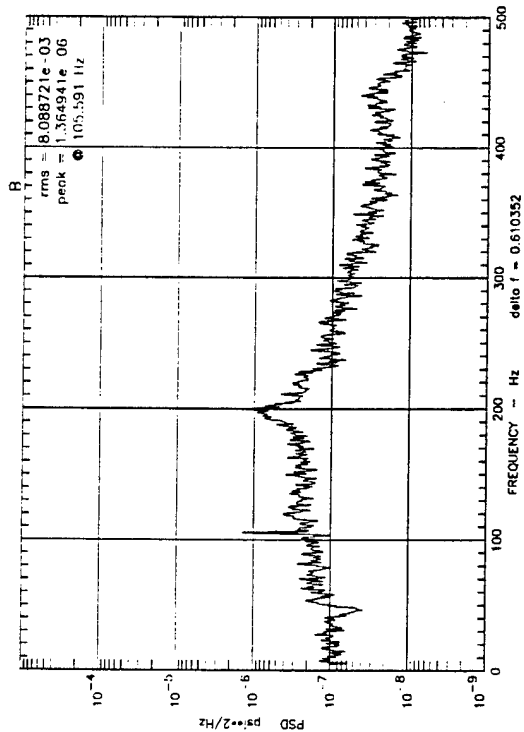


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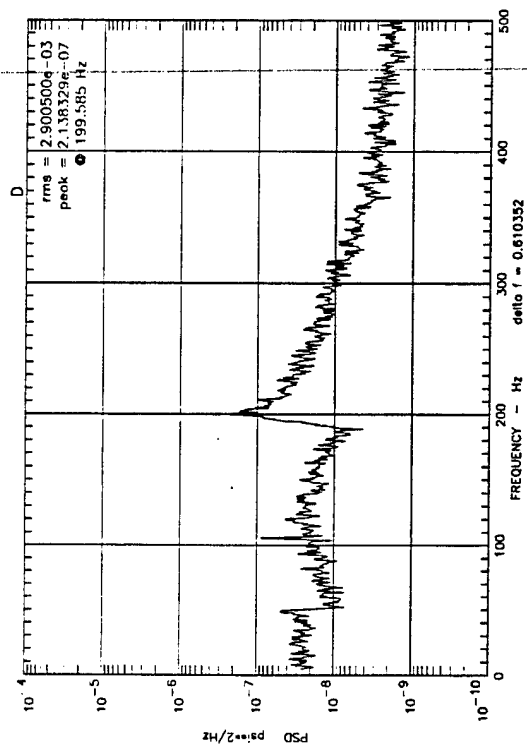




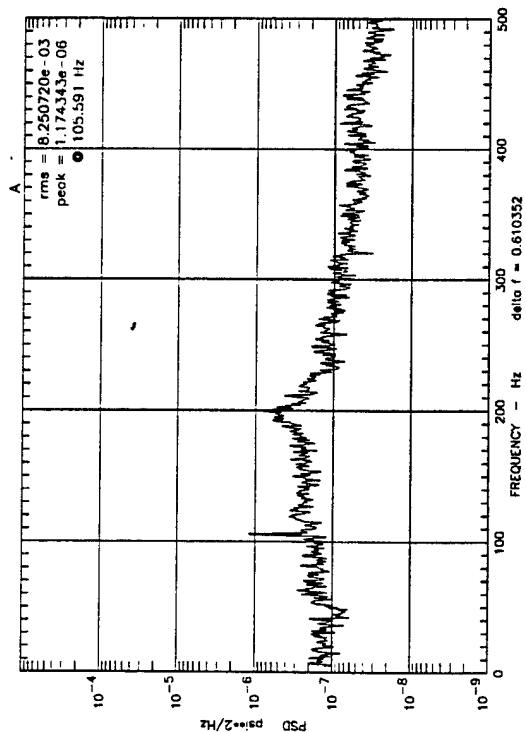
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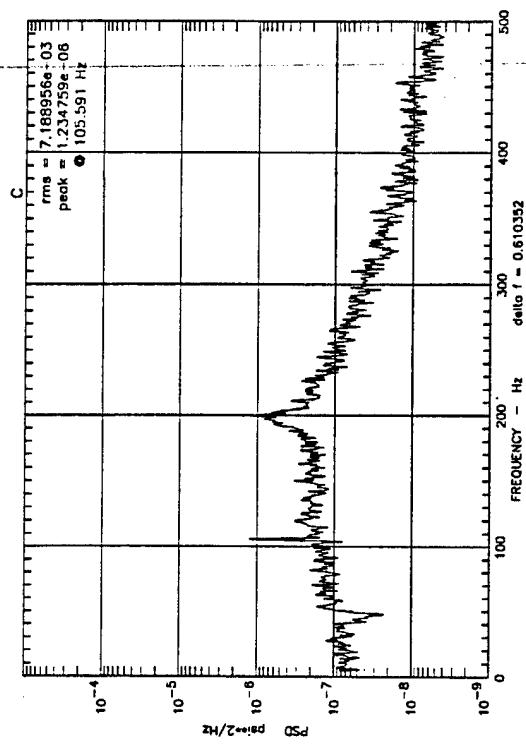
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F-15 TPN\_3018: q=56 alpha=16 beta=0 bp=65g&w

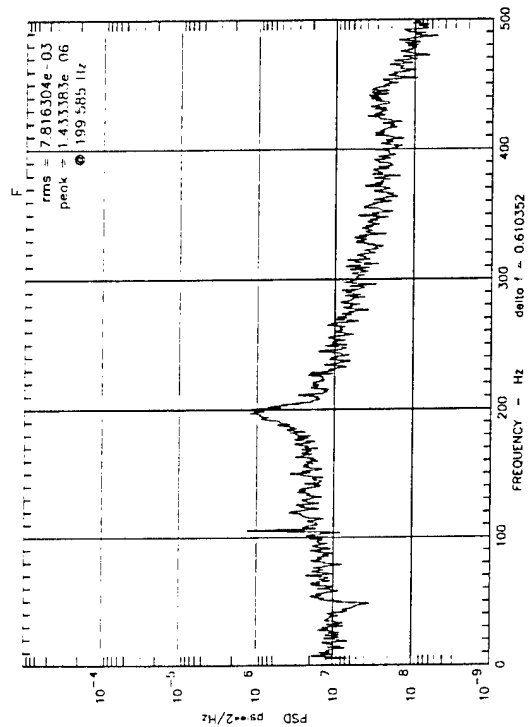


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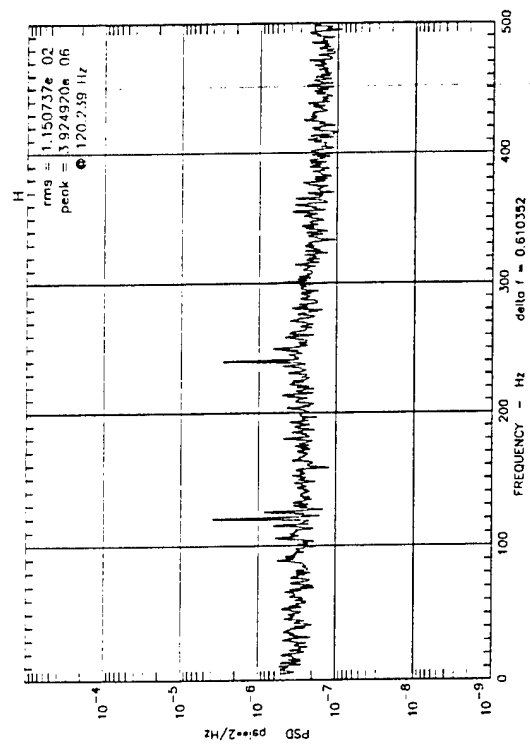




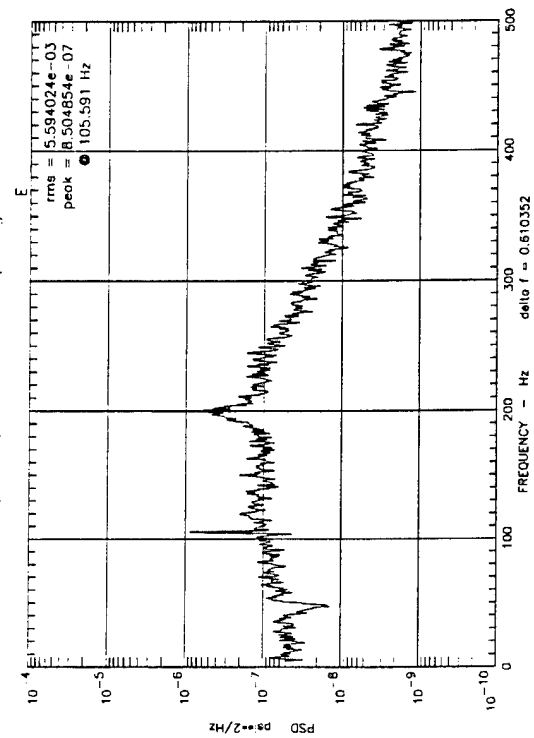
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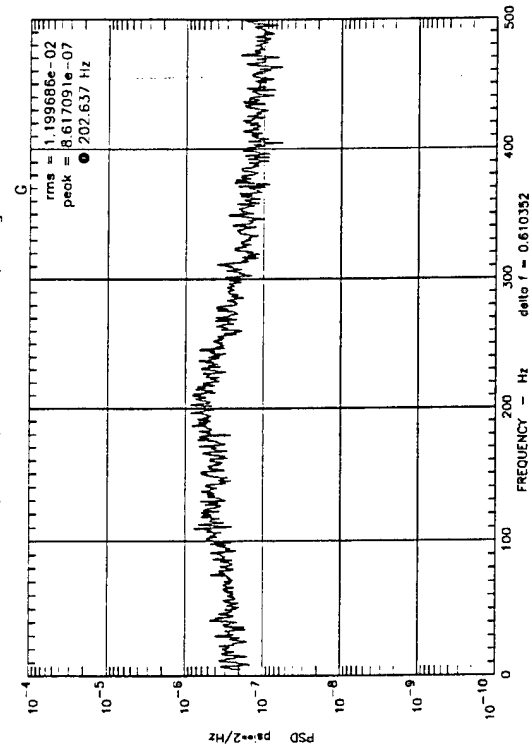
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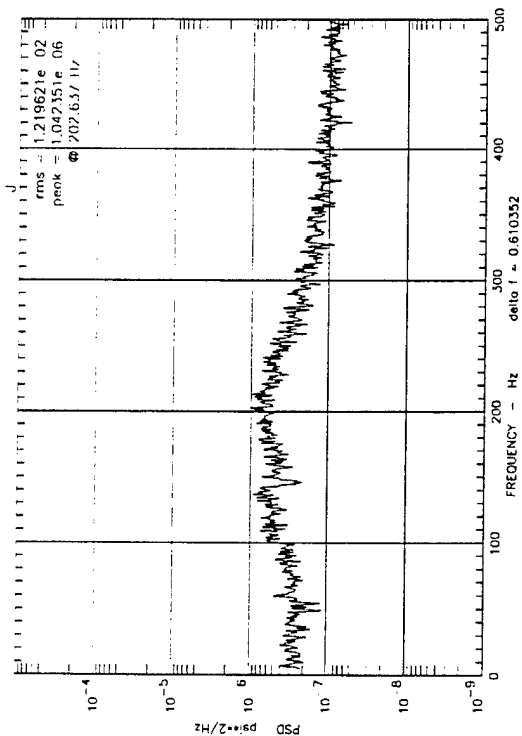
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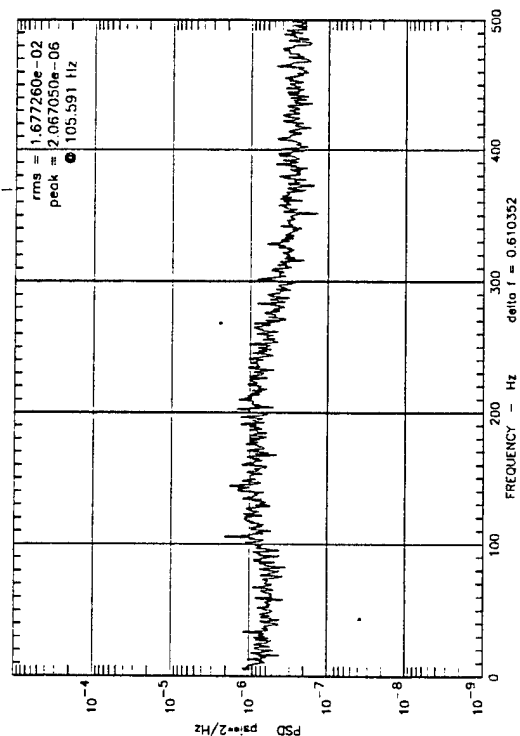
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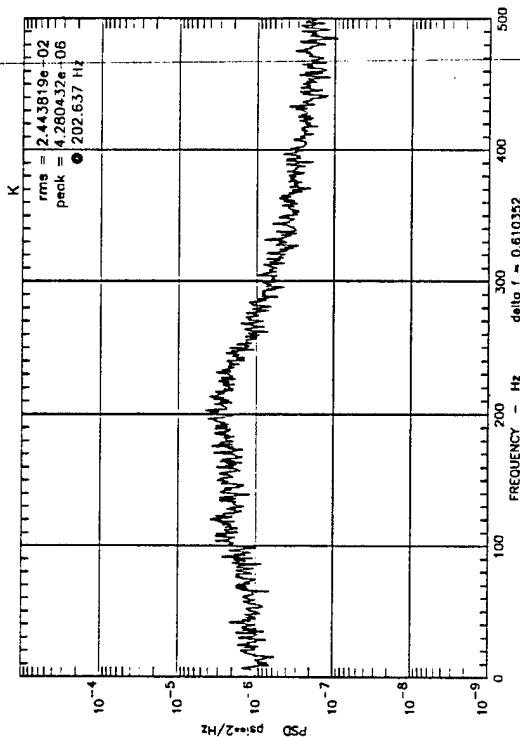
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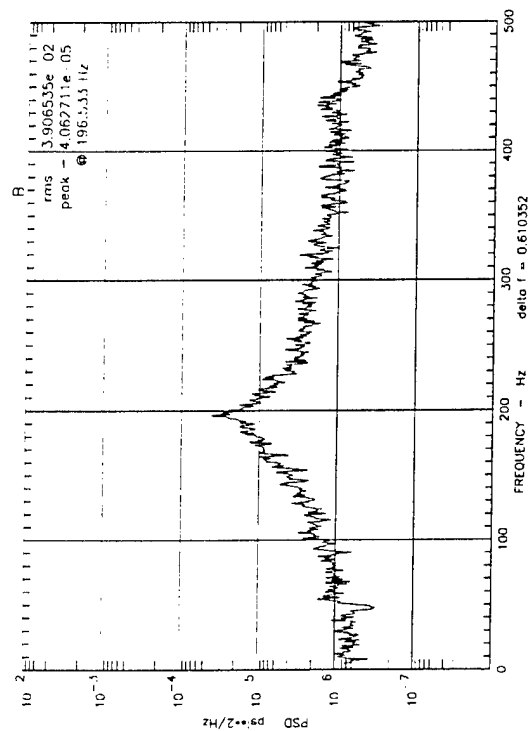
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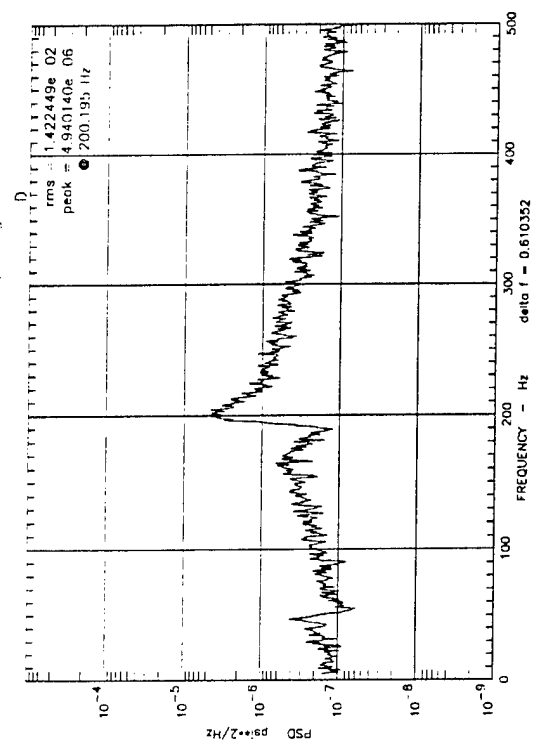
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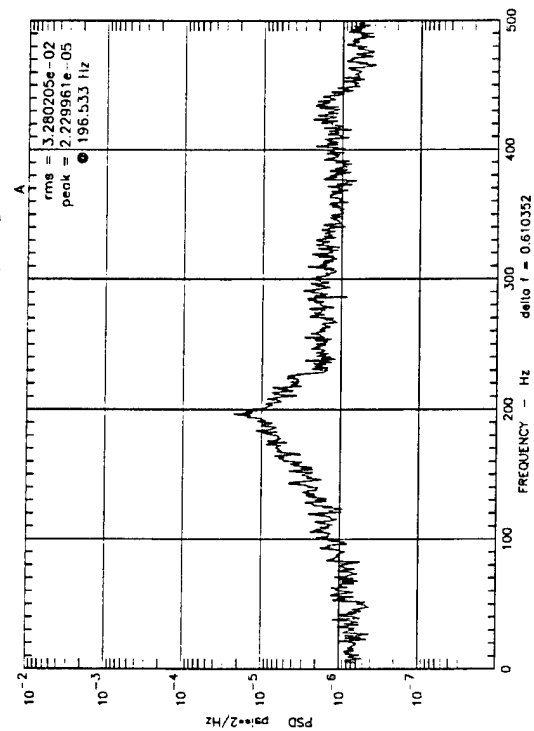
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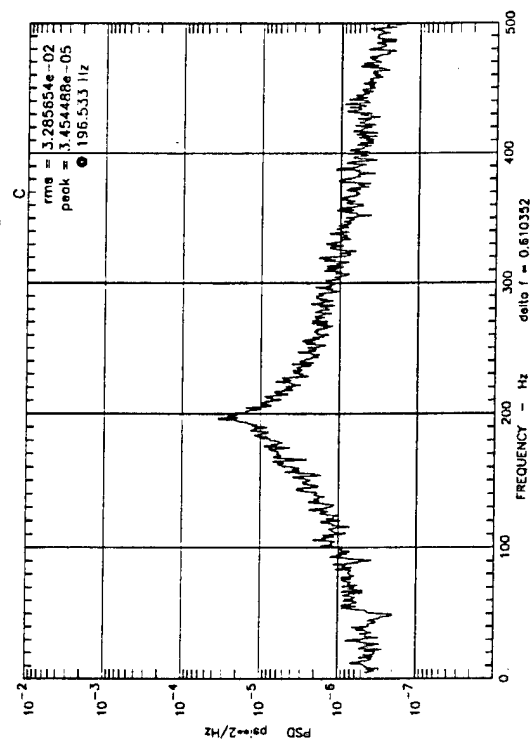
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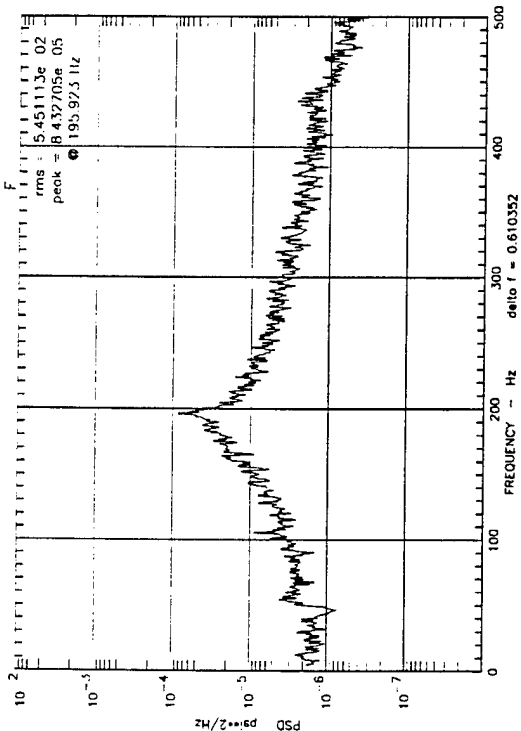
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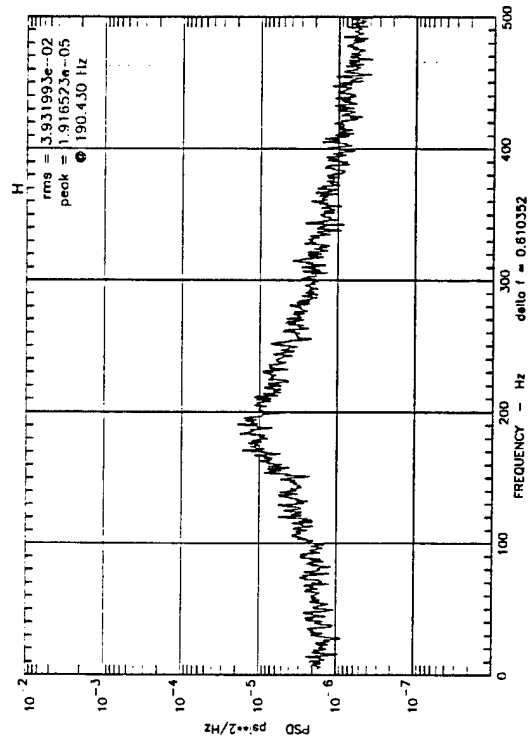
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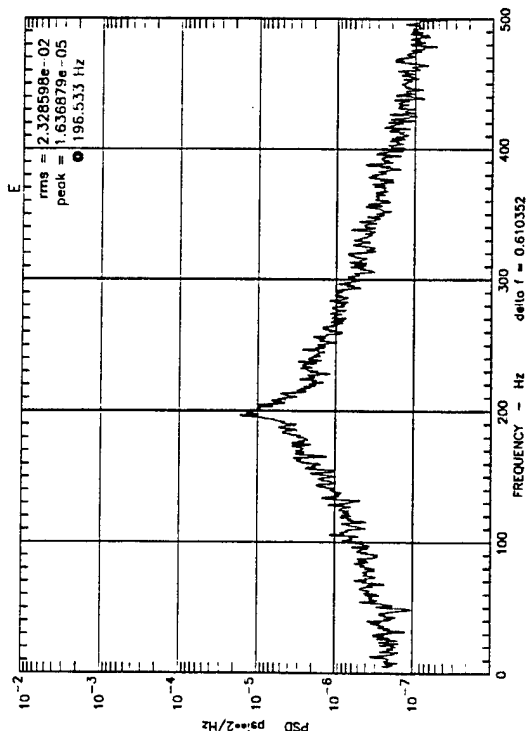
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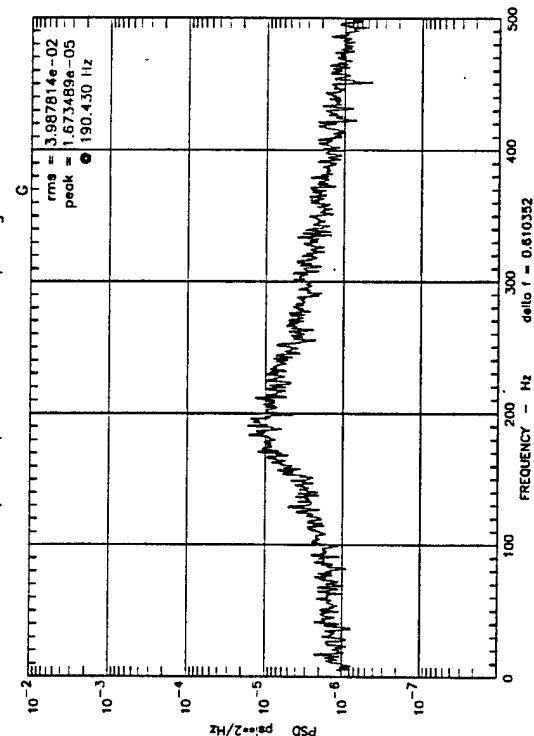
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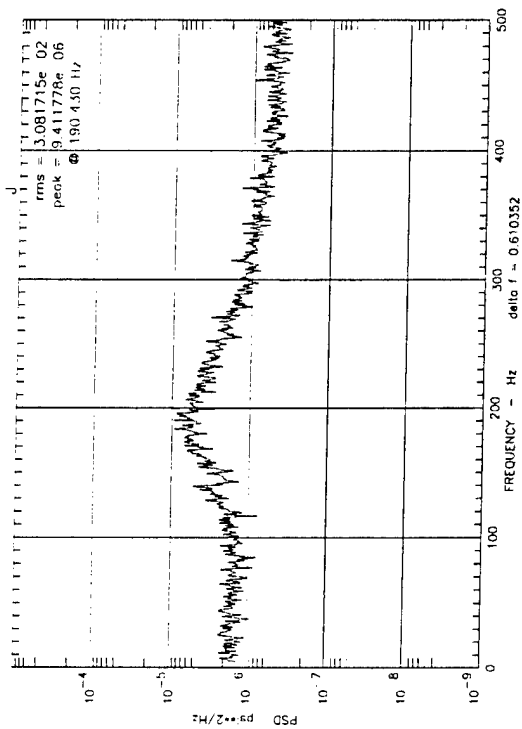
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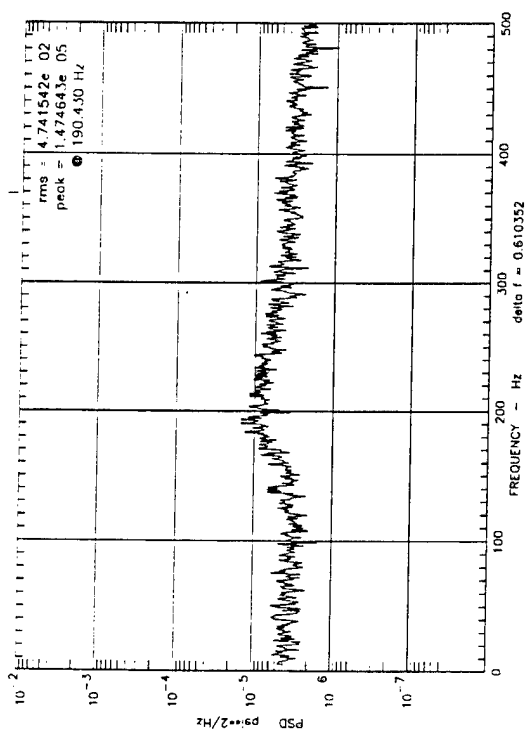
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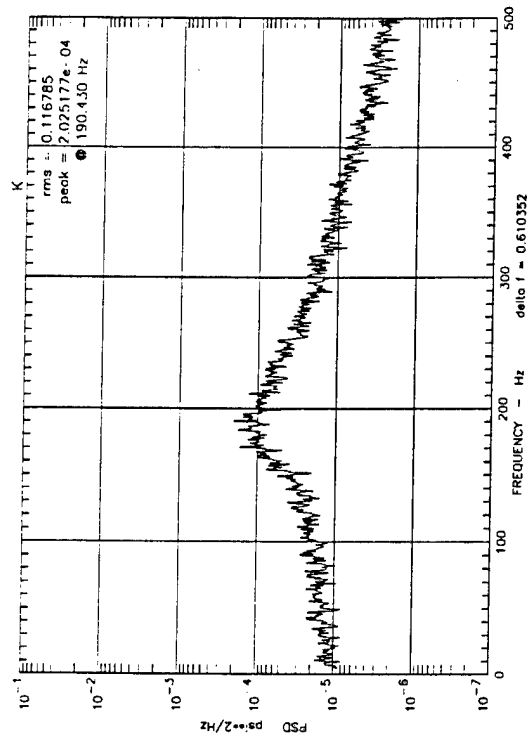
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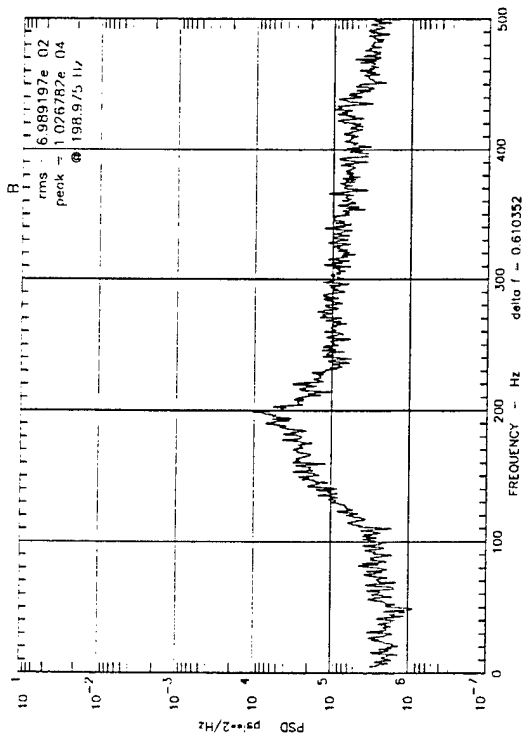
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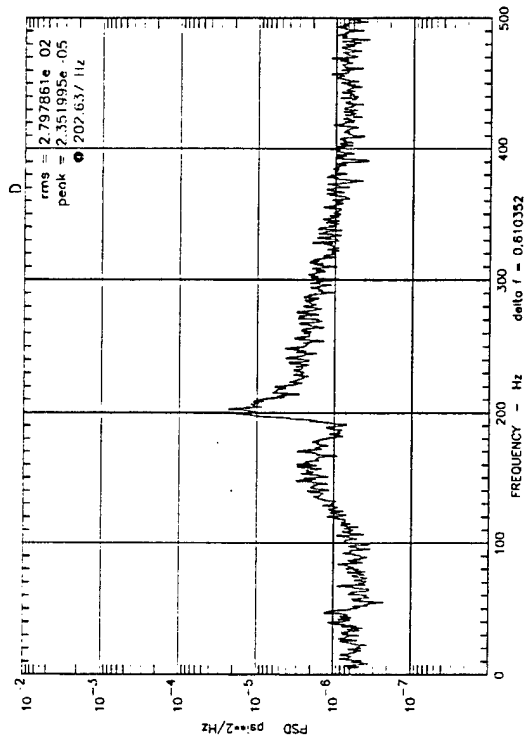
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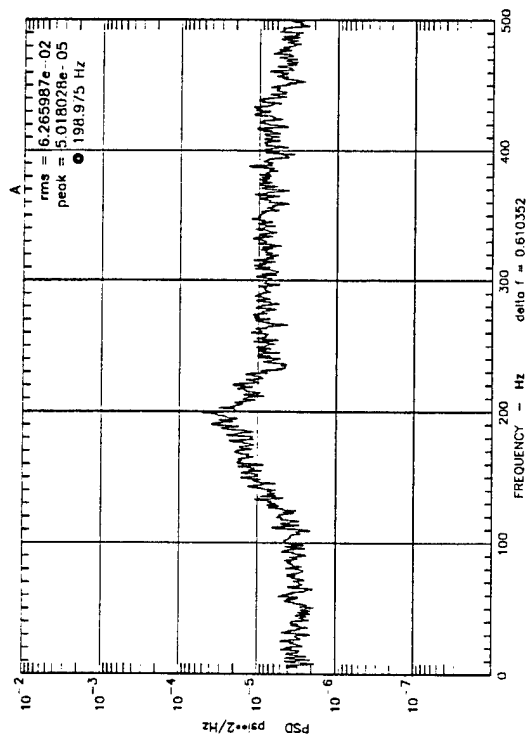
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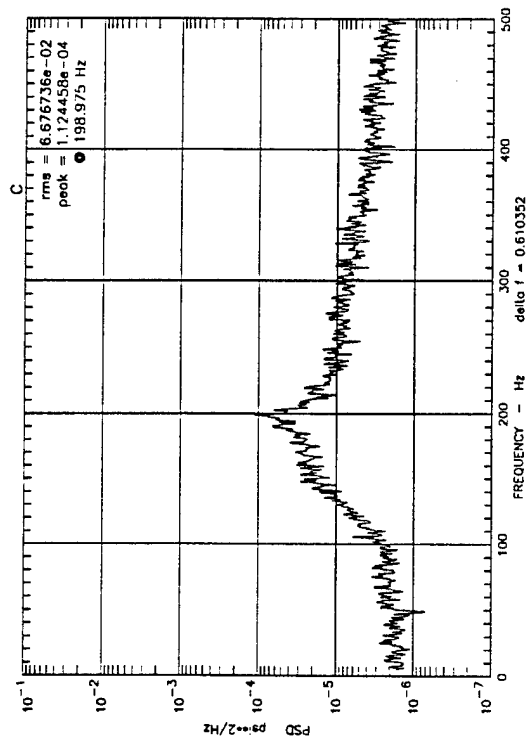
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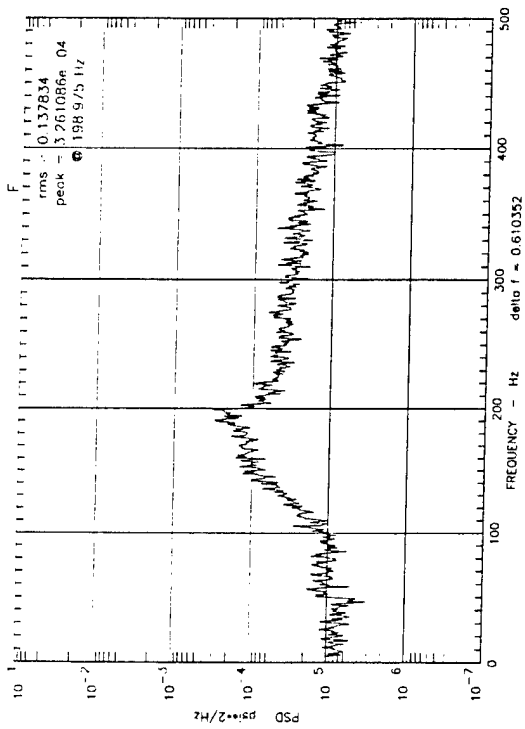
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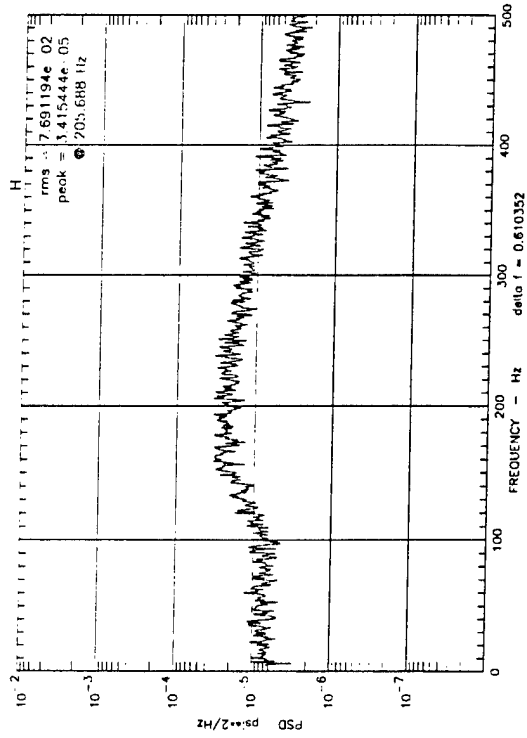
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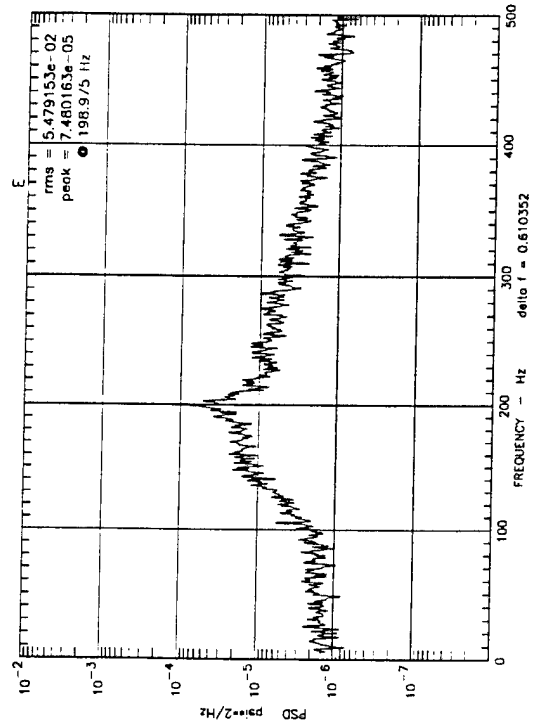
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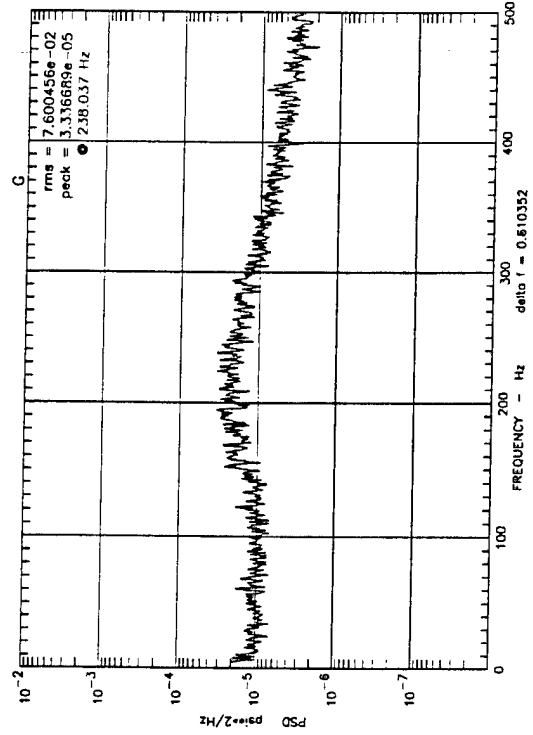
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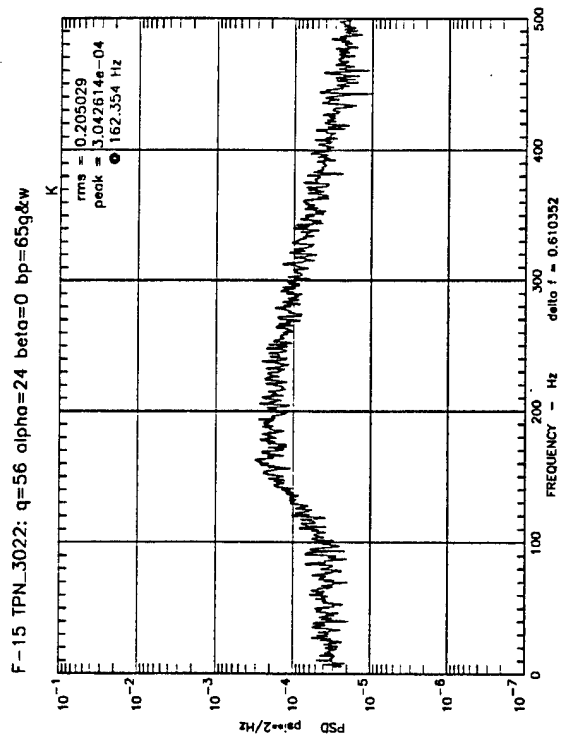
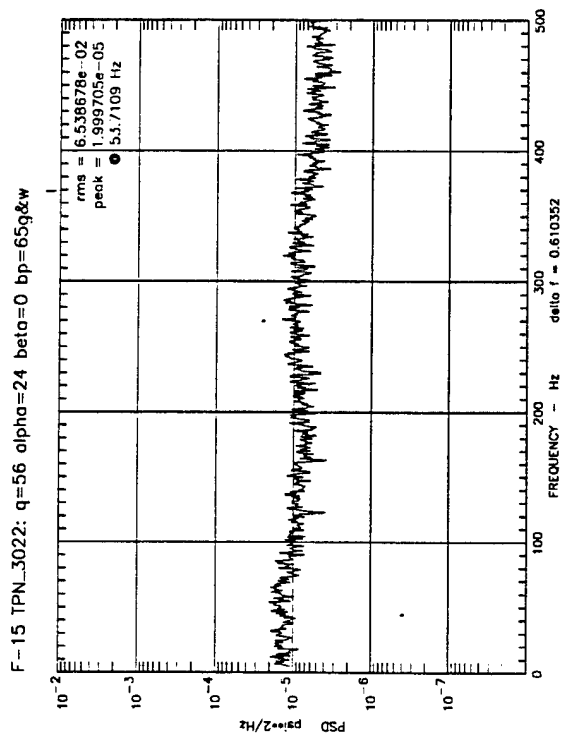
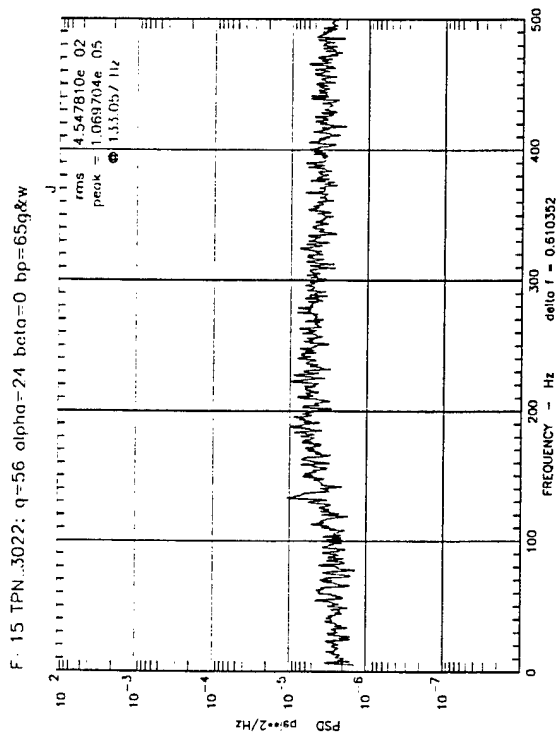


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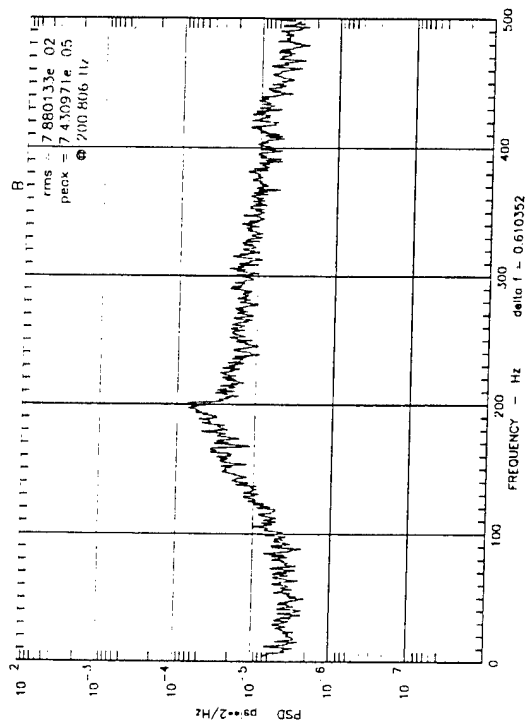
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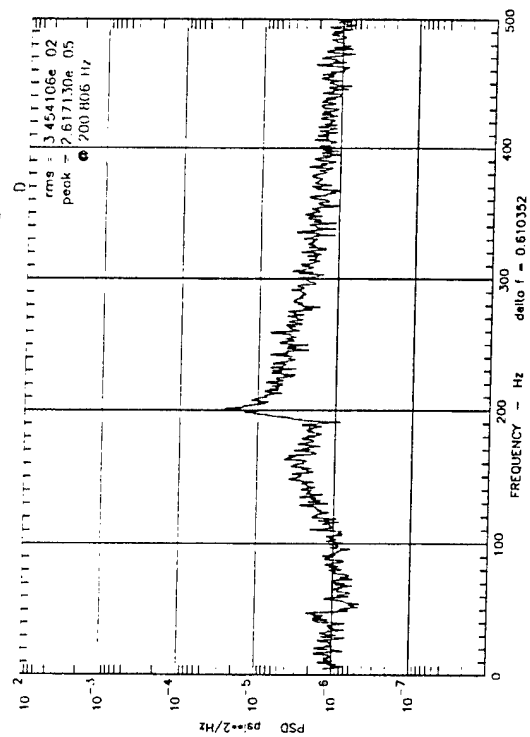




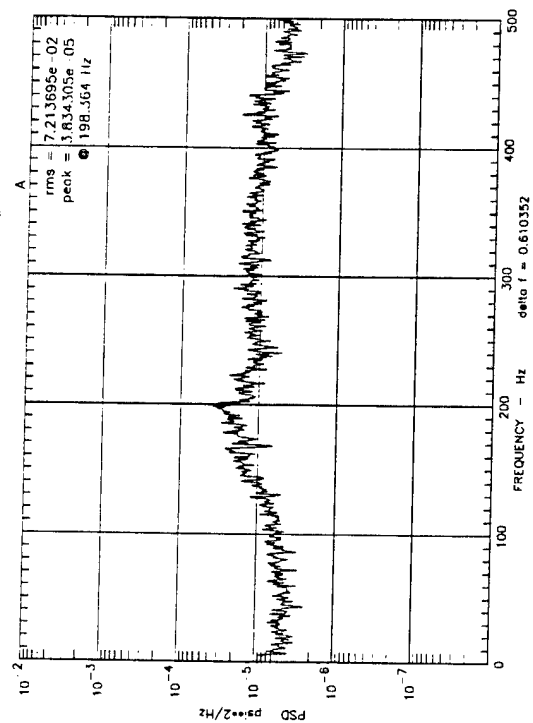
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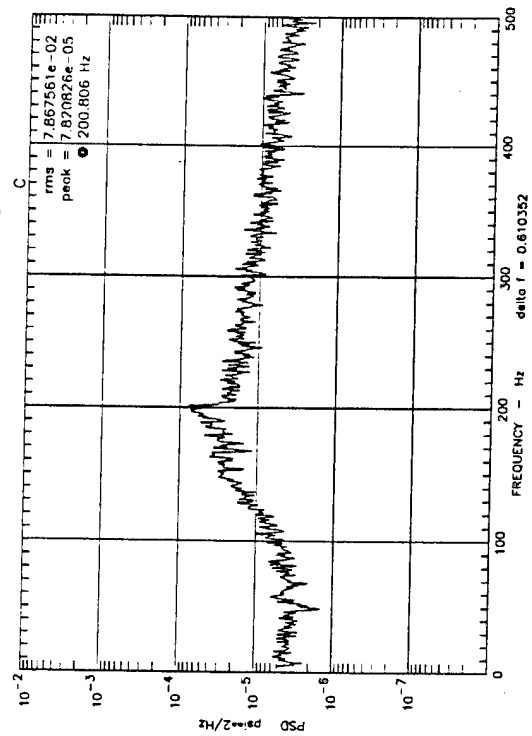
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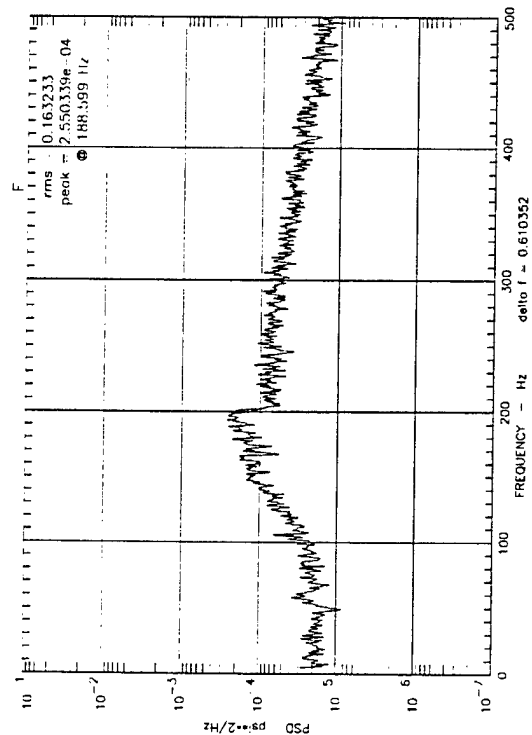
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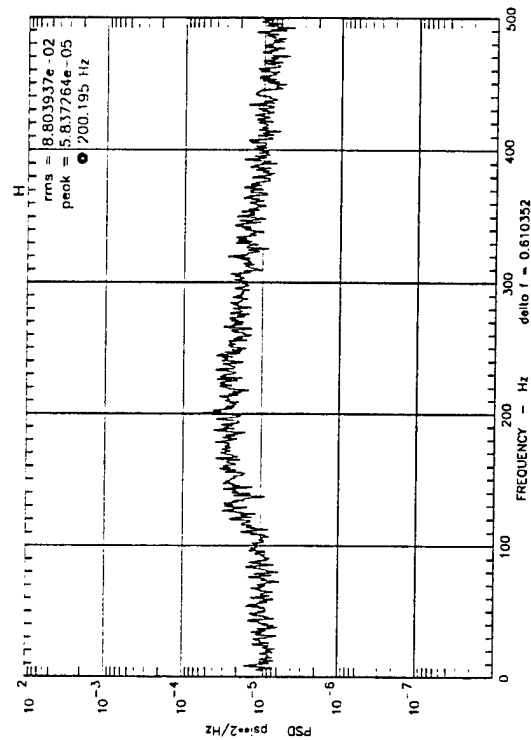
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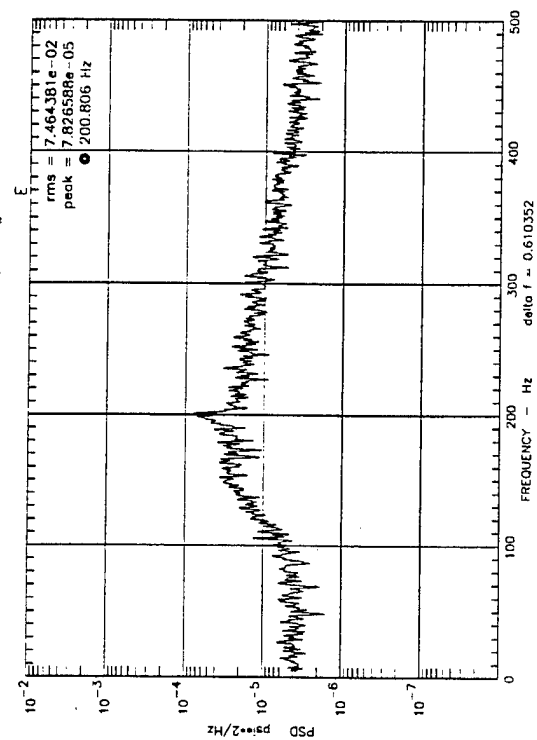
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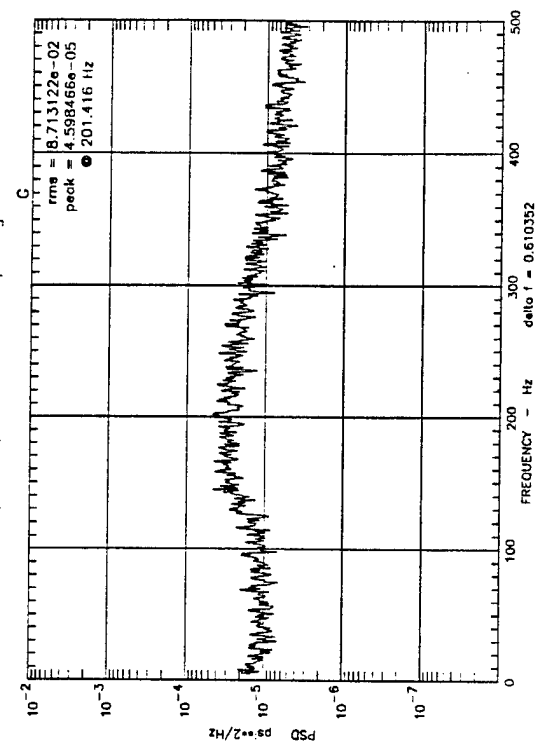
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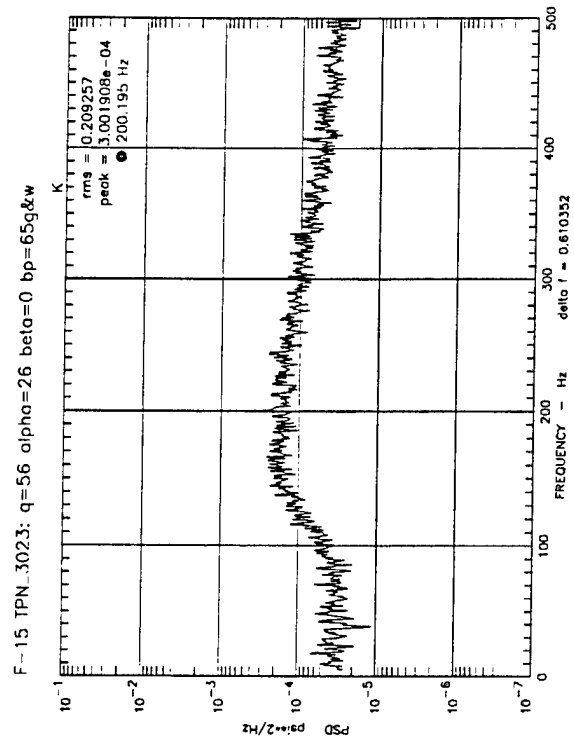
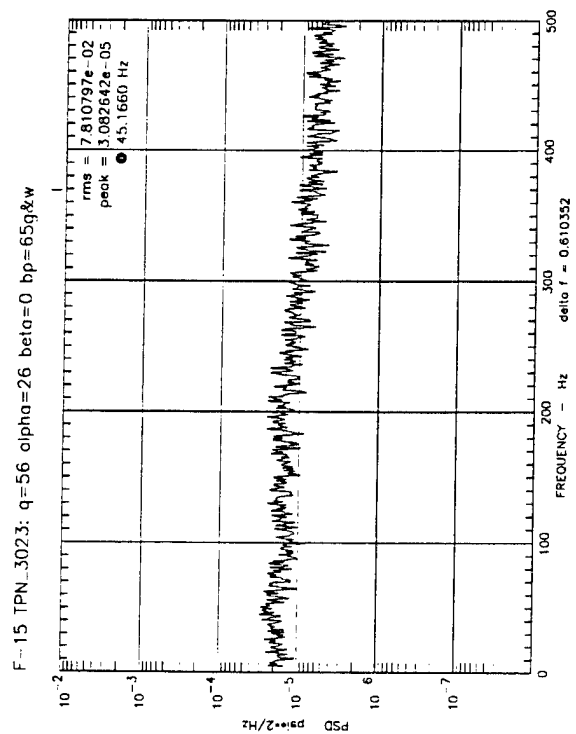
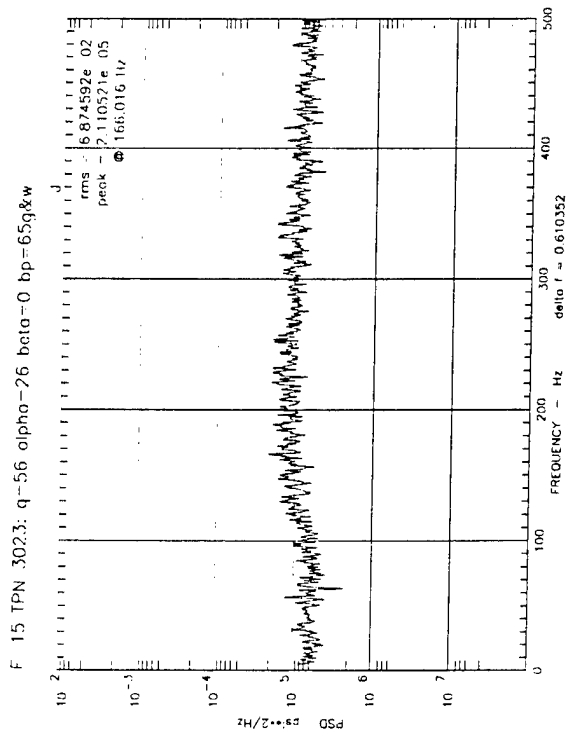


F 15 TPN 3023: q=56 alpha=26 beta=0 bp=65g&w

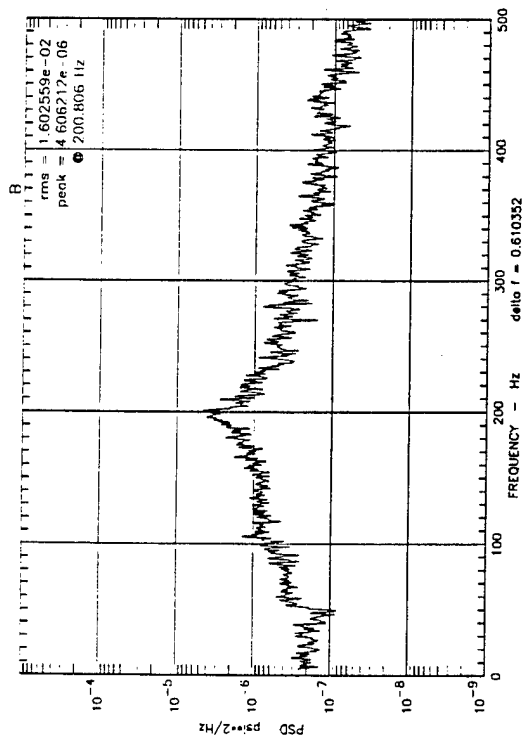


F 15 TPN 3023: q=56 alpha=26 beta=0 bp=65g&w

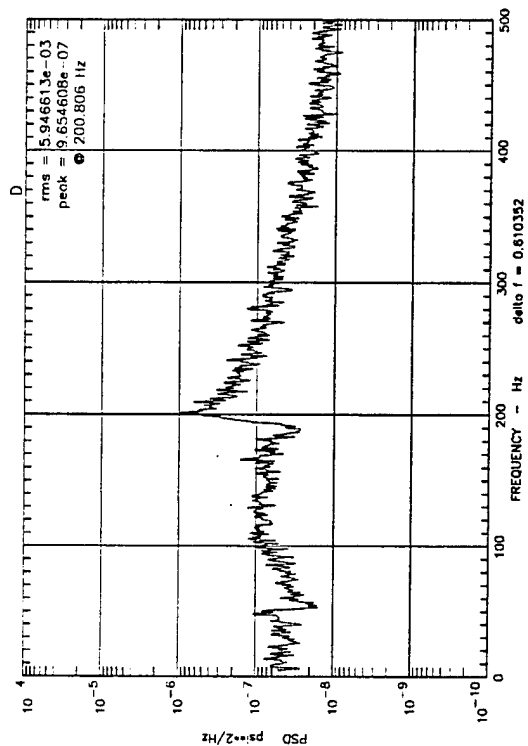




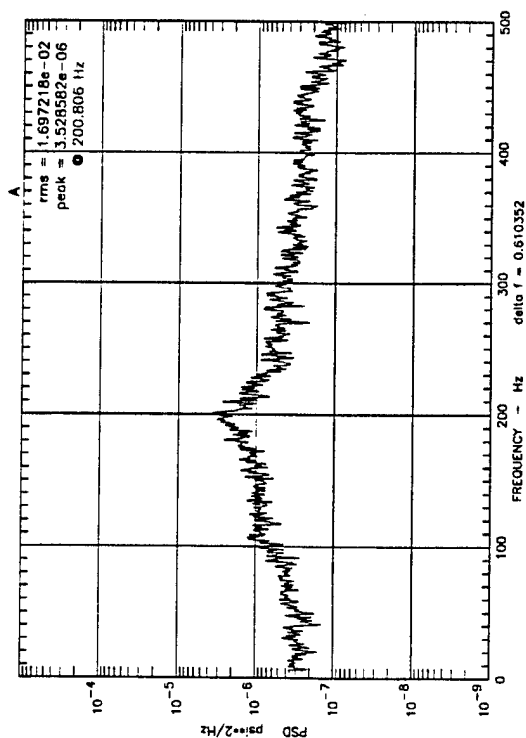
F-15 TPN\_3012: q=56 alpha=16 beta=-4 bp=65g&w



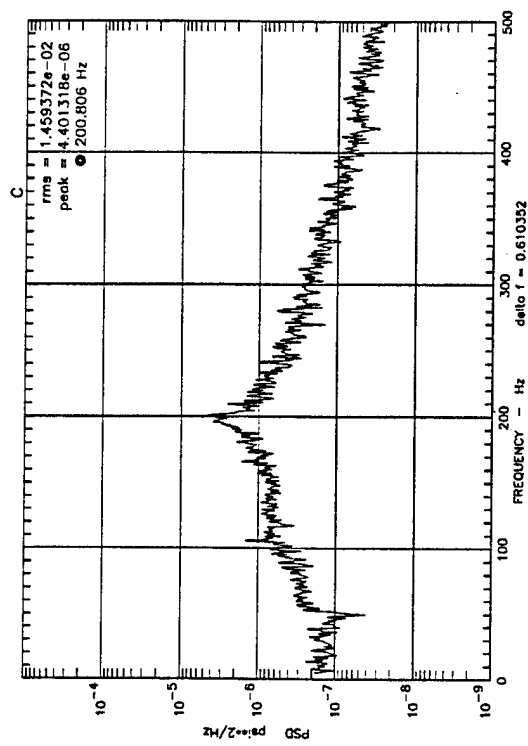
F-15 TPN\_3012: q=56 alpha=16 beta=-4 bp=65g&w



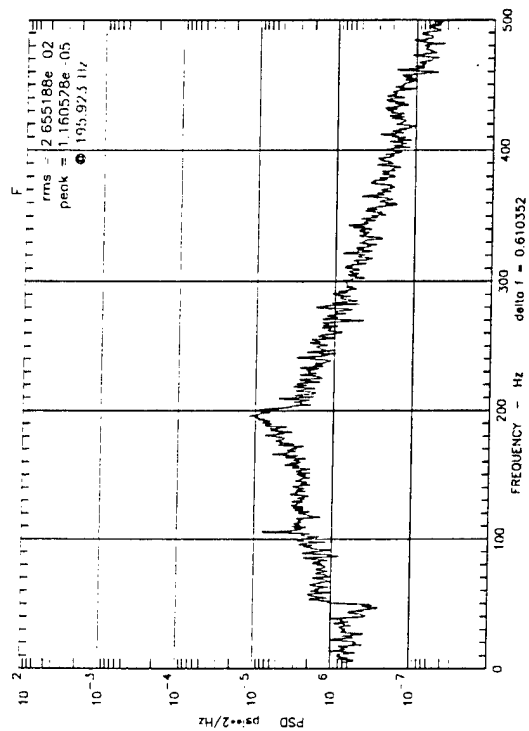
F-15 TPN\_3012: q=56 alpha=16 beta=-4 bp=65g&w



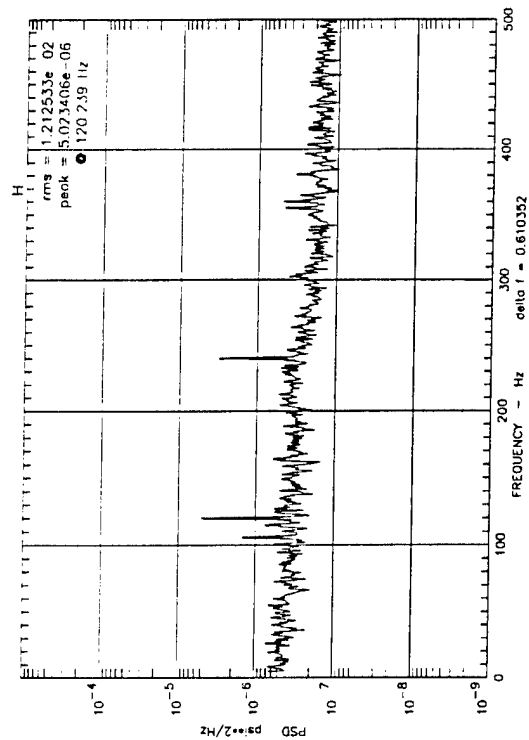
F-15 TPN\_3012: q=56 alpha=16 beta=-4 bp=65g&w



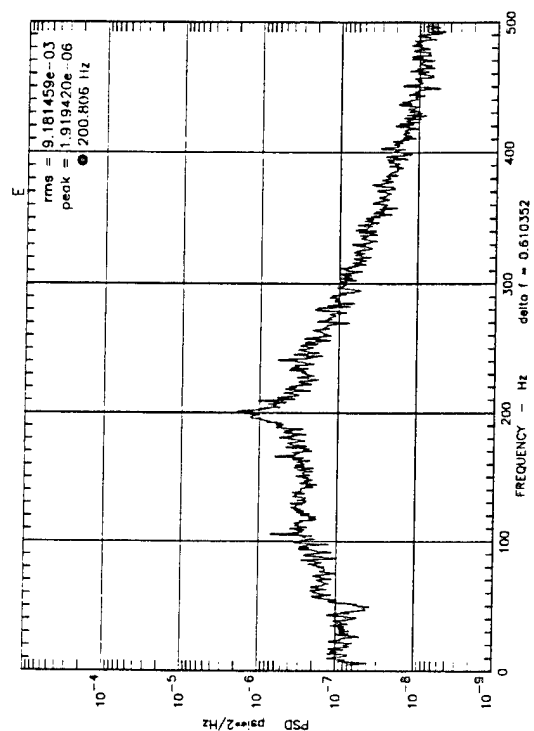
F-15 TPN\_3012: q=56 alpha=16 beta=-4 bp=65g&w



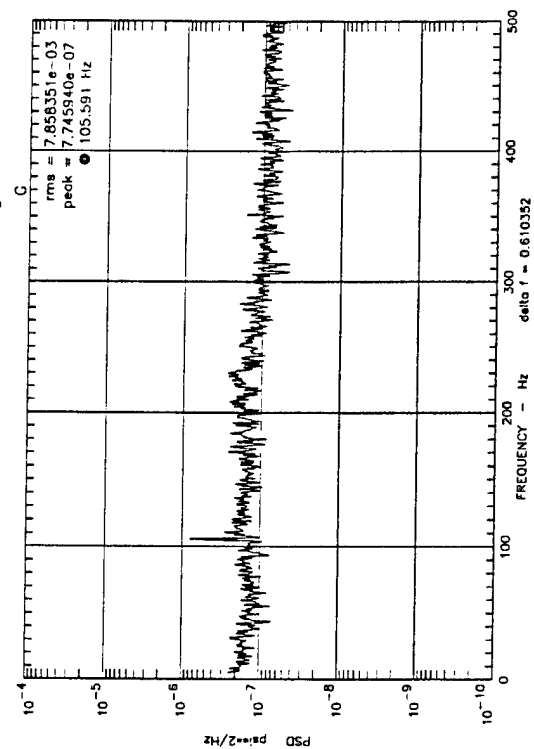
F-15 TPN\_3012: q=56 alpha=16 beta=-4 bp=65g&w



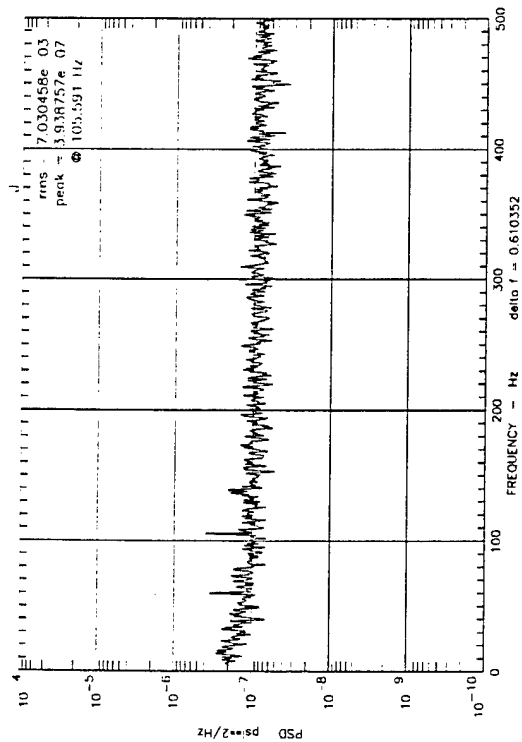
F-15 TPN\_3012: q=56 alpha=16 beta=-4 bp=65g&w



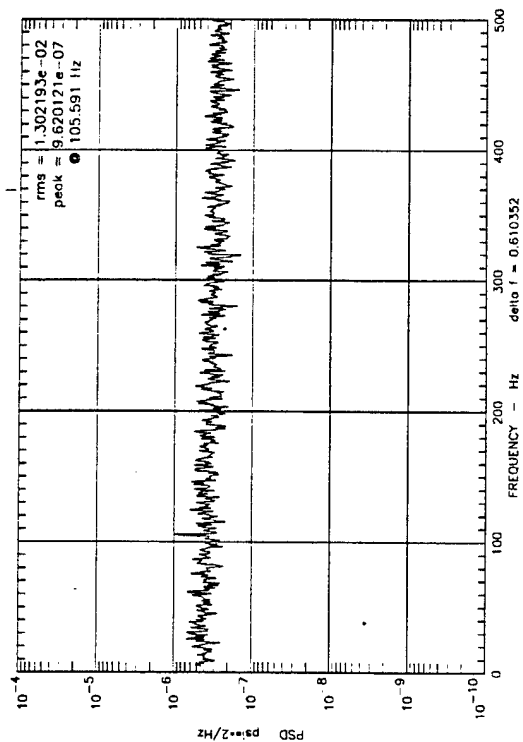
F-15 TPN\_3012: q=56 alpha=16 beta=-4 bp=65g&w



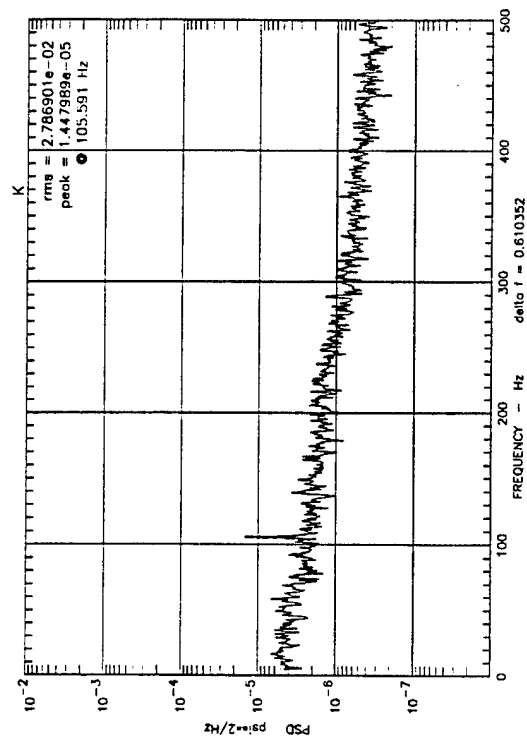
F-15 TPN\_3012: q=56 alpha=16 beta=-4 bp=65g&w



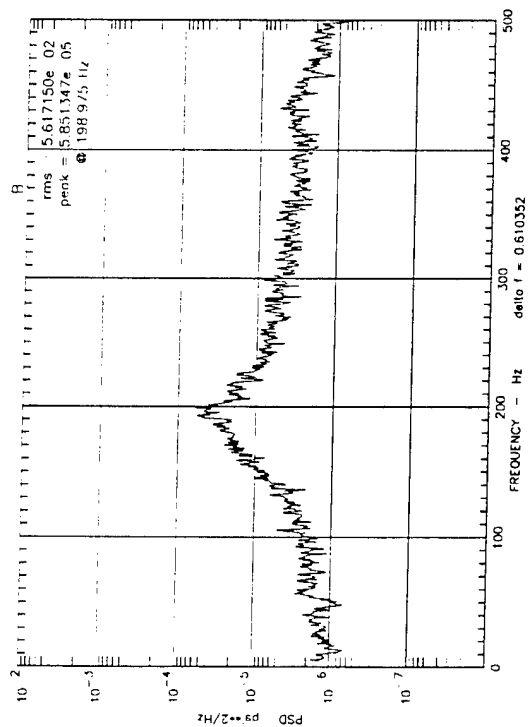
F-15 TPN\_3012: q=56 alpha=16 beta=-4 bp=65g&w



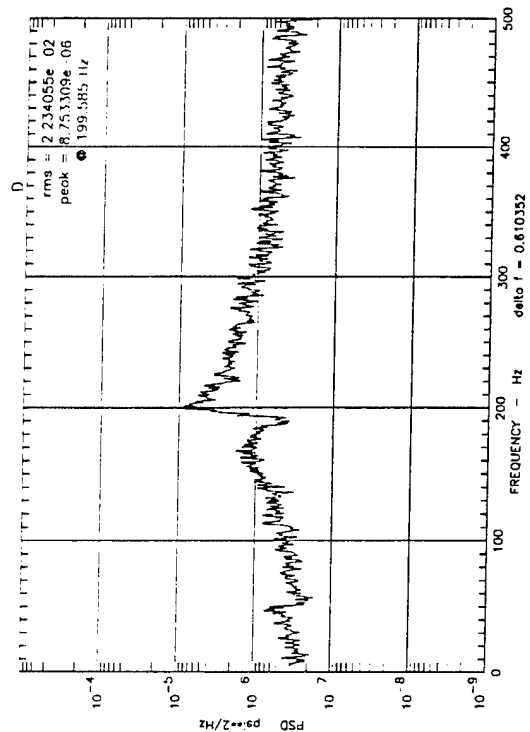
F-15 TPN\_3012: q=56 alpha=16 beta=-4 bp=65g&w



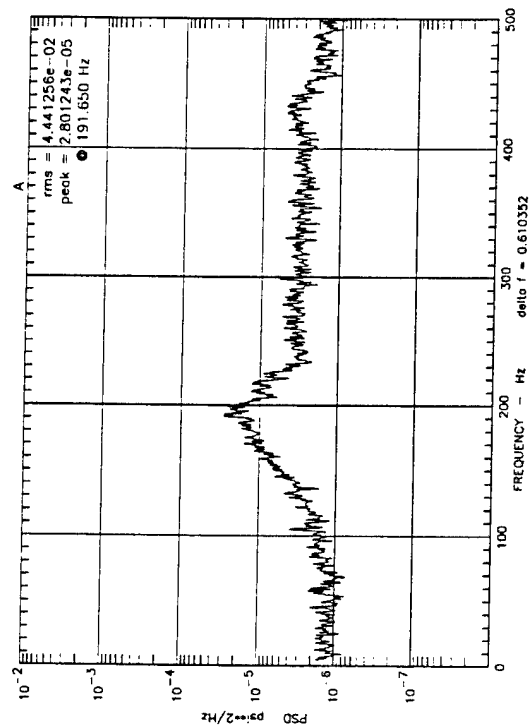
F-15 TPN\_3014: q=56 alpha=20 beta=-4 bp=65g&w



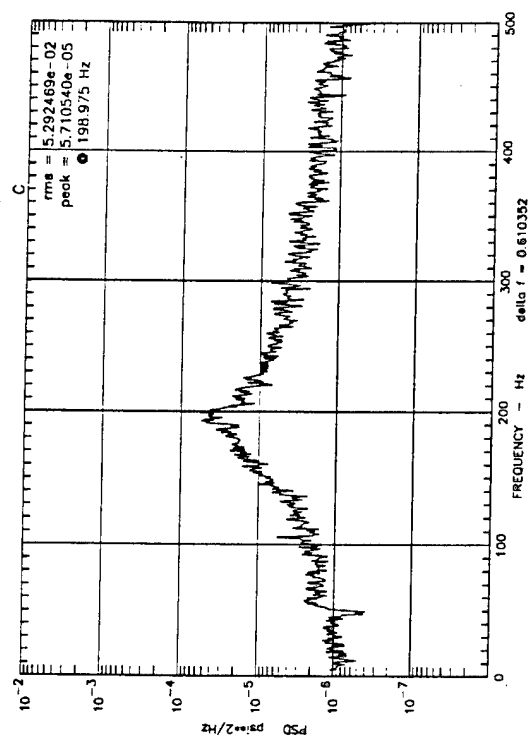
F-15 TPN\_3014: q=56 alpha=20 beta=-4 bp=65g&w



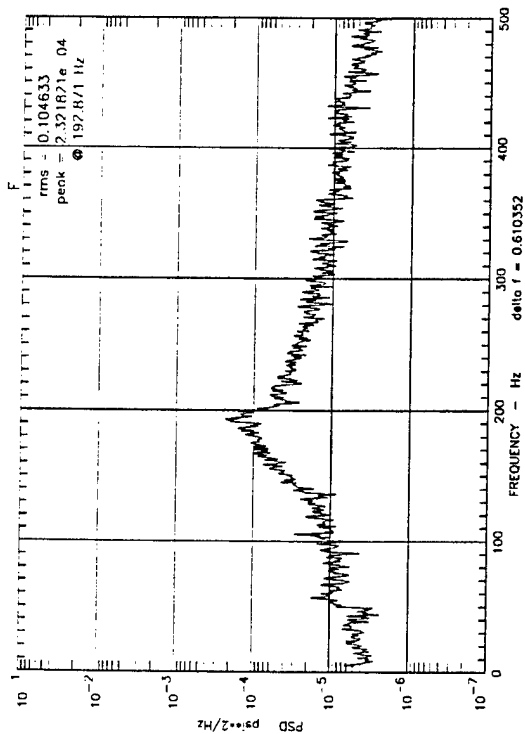
F-15 TPN\_3014: q=56 alpha=20 beta=-4 bp=65g&w



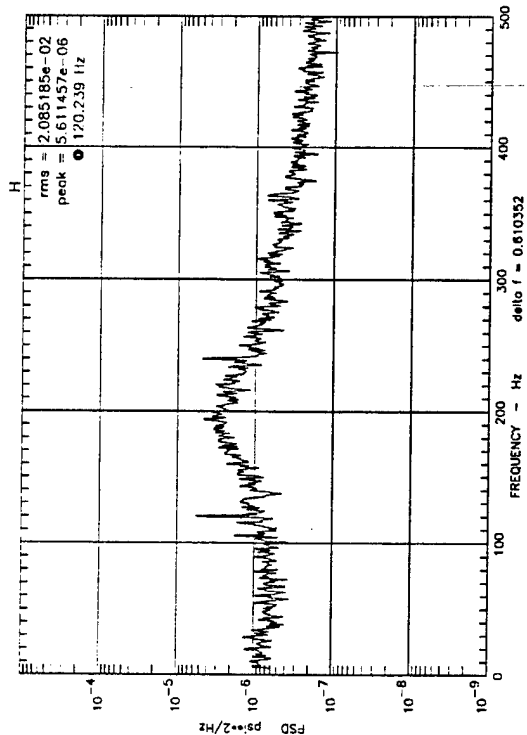
F-15 TPN\_3014: q=56 alpha=20 beta=-4 bp=65g&w



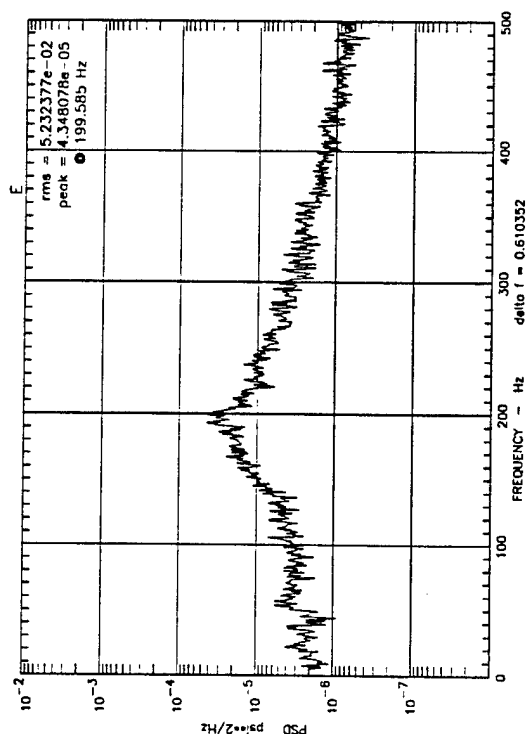
F-15 TPN\_3014: q=56 alpha=20 beta=-4 bp=65g&w



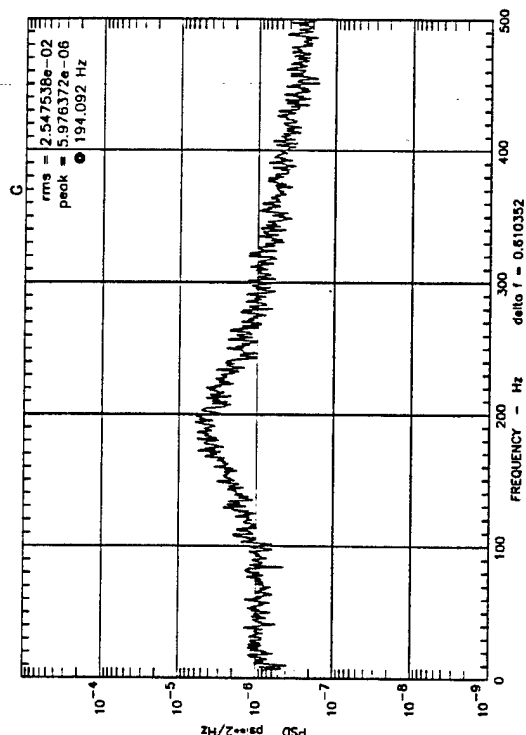
F-15 TPN\_3014: q=56 alpha=20 beta=-4 bp=65g&w



F-15 TPN\_3014: q=56 alpha=20 beta=-4 bp=65g&w

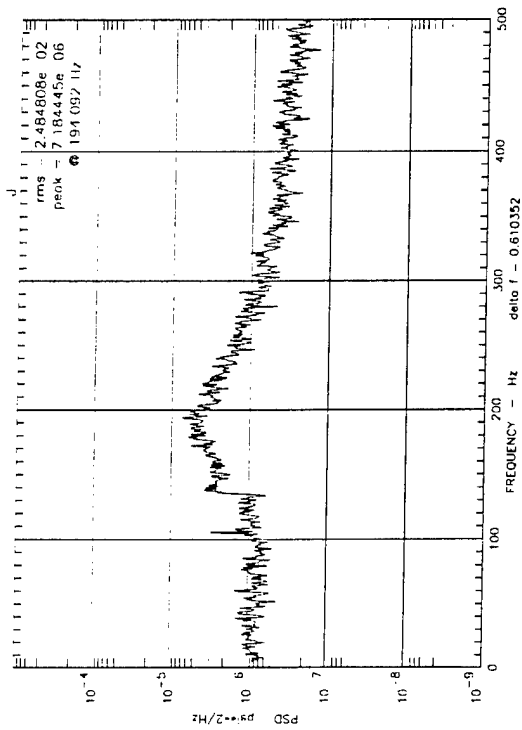


F-15 TPN\_3014: q=56 alpha=20 beta=-4 bp=65g&w

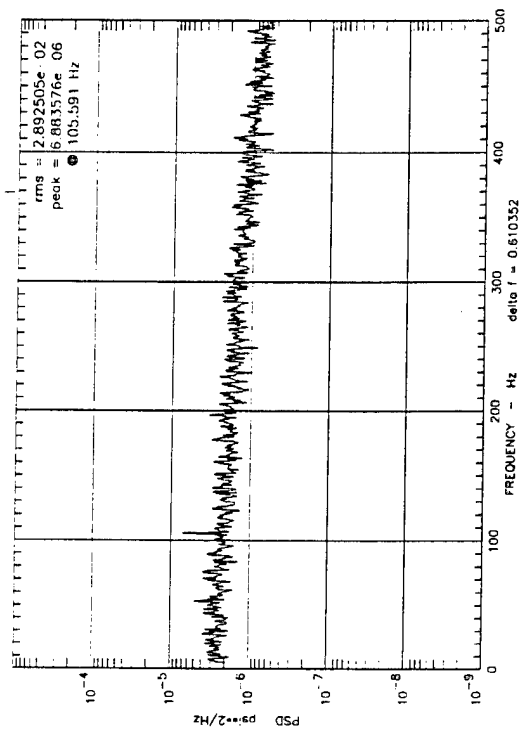




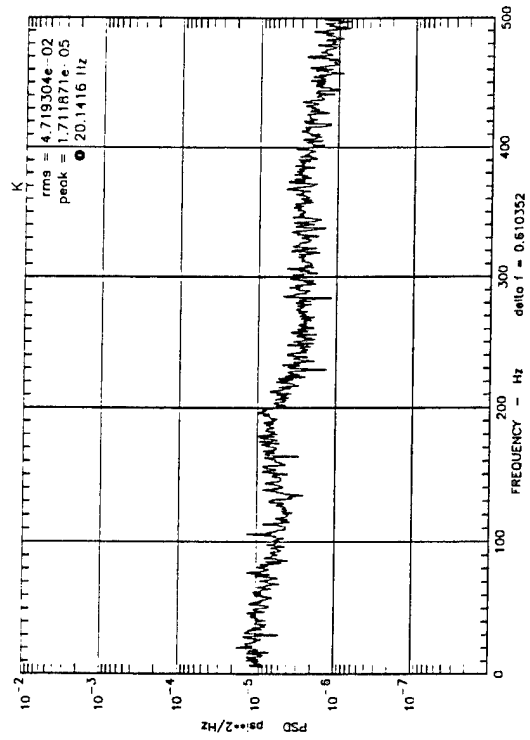
F-15 TPN\_3014: q=56 alpha=20 beta=-4 bp=65g&amp;w



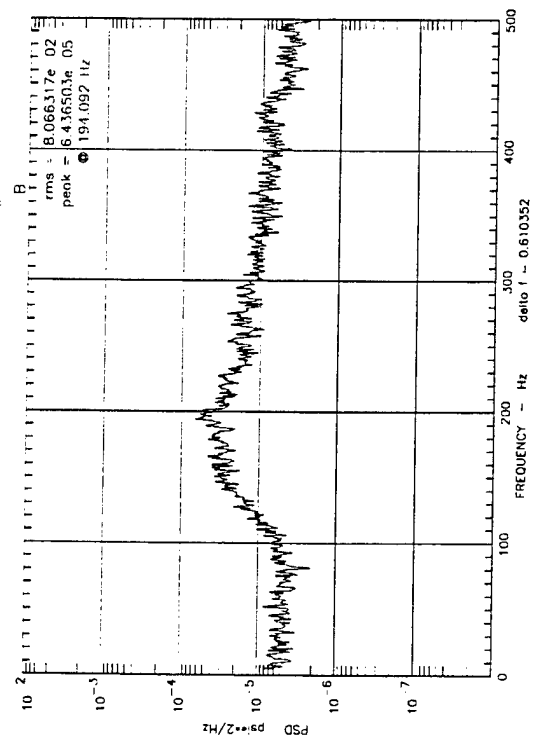
F-15 TPN\_3014: q=56 alpha=20 beta=-4 bp=65g&amp;w



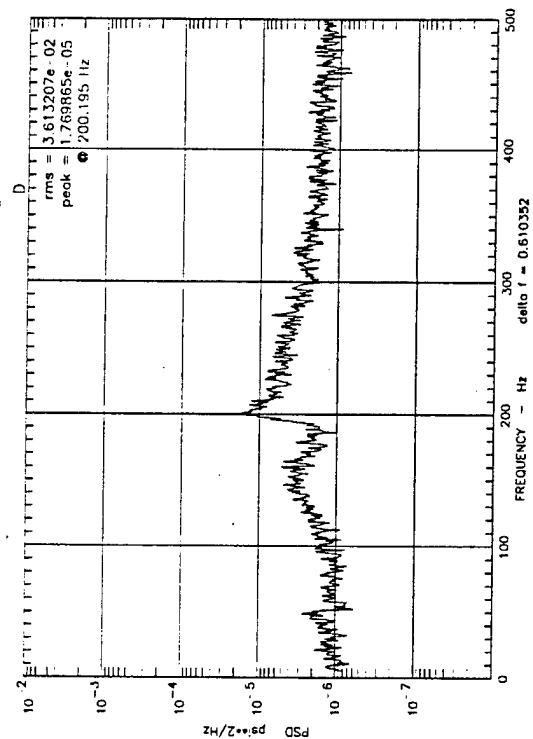
F-15 TPN\_3014: q=56 alpha=20 beta=-4 bp=65g&amp;w



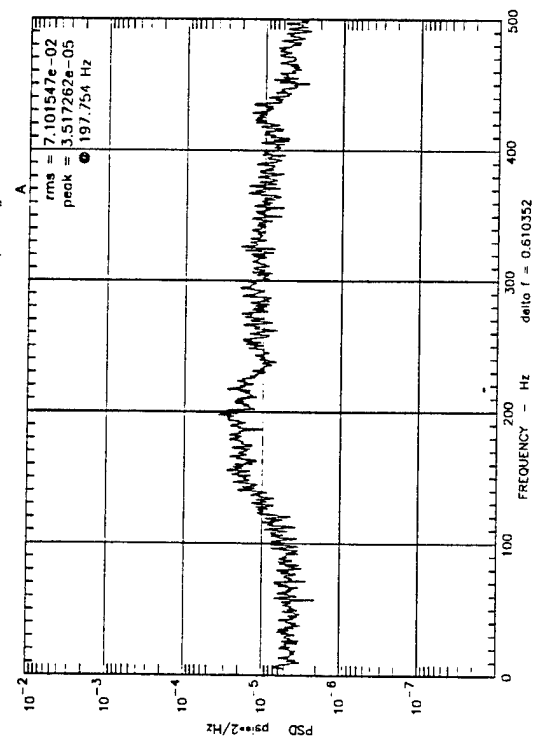
F-15 TPN\_3016: q=56 alpha=24 beta=-4 bp=65g&w



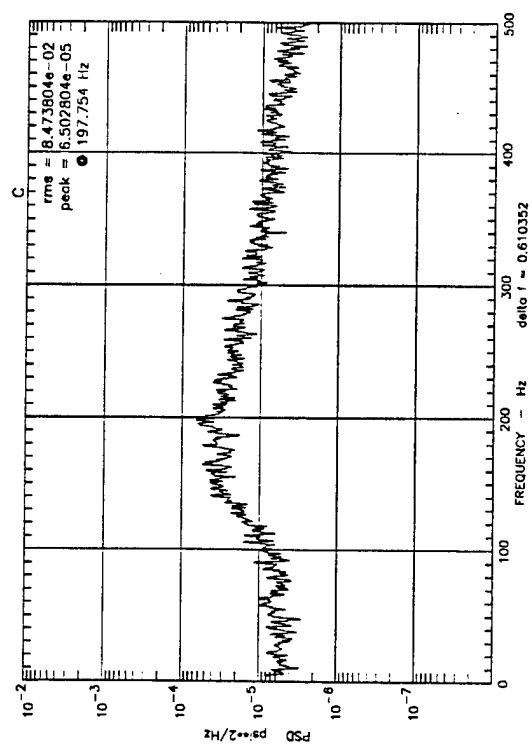
F-15 TPN\_3016: q=56 alpha=24 beta=-4 bp=65g&w



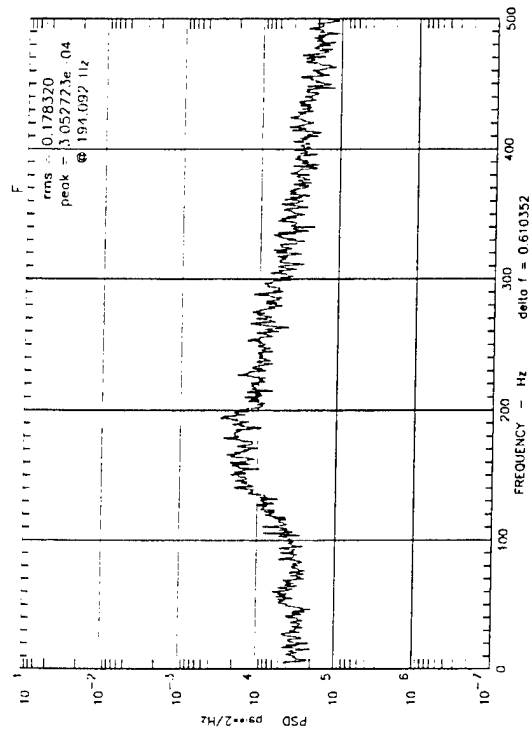
F-15 TPN\_3016: q=56 alpha=24 beta=-4 bp=65g&w



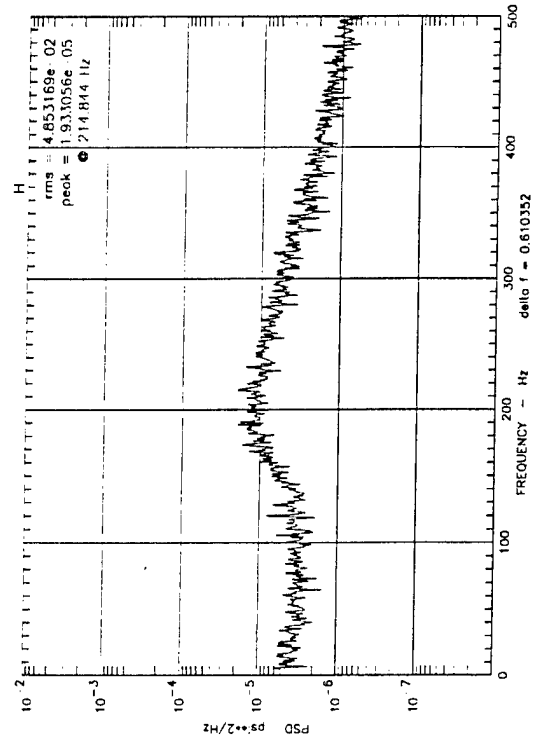
F-15 TPN\_3016: q=56 alpha=24 beta=-4 bp=65g&w



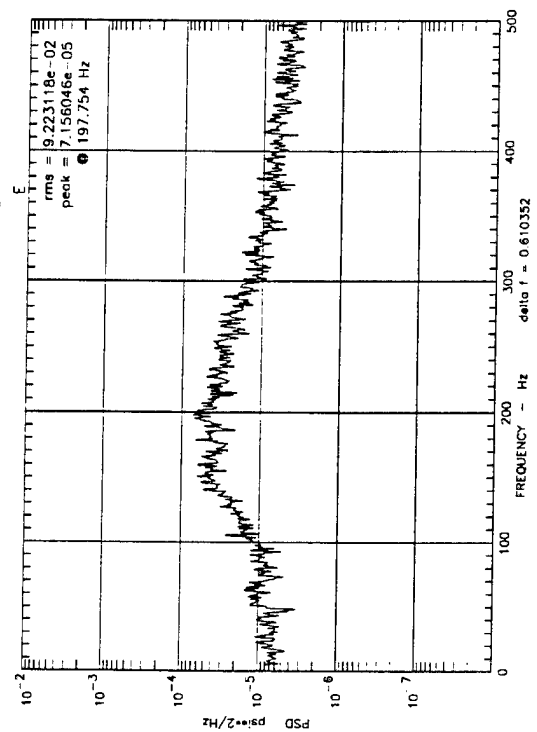
F-15 TPN\_3016: q=56 alpha=24 beta=-4 bp=65g&w



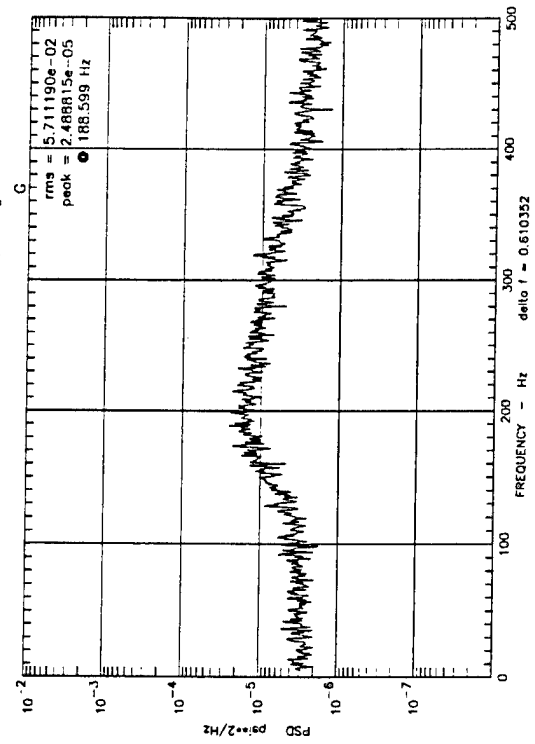
F-15 TPN\_3016: q=56 alpha=24 beta=-4 bp=65g&w



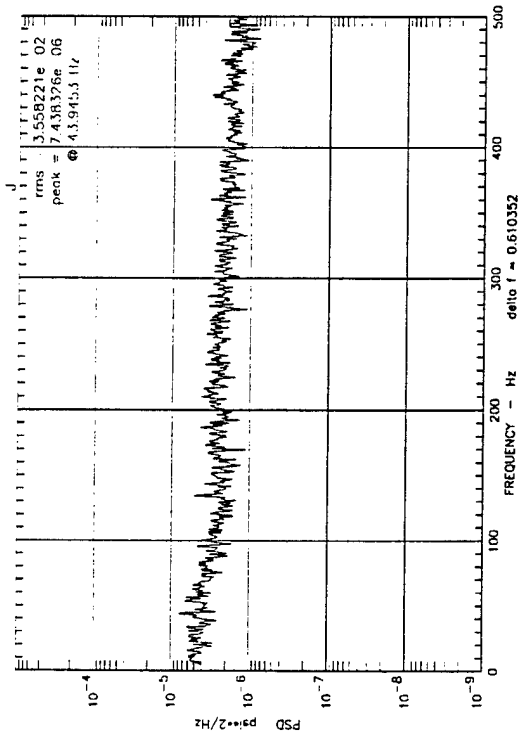
F-15 TPN\_3016: q=56 alpha=24 beta=-4 bp=65g&w



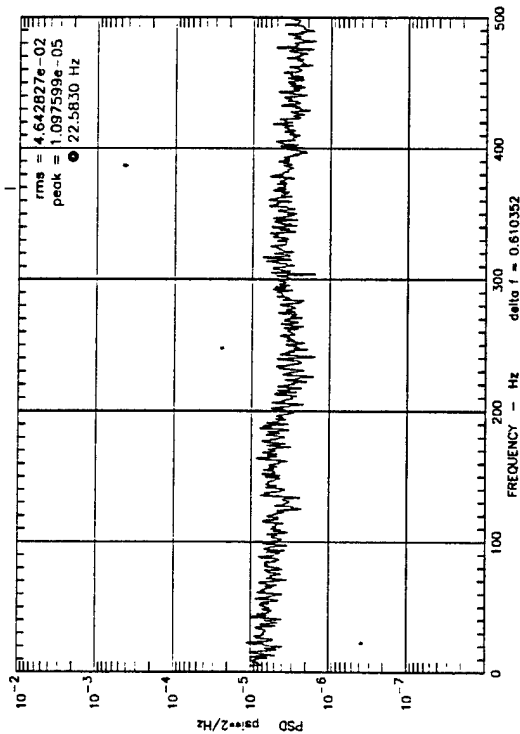
F-15 TPN\_3016: q=56 alpha=24 beta=-4 bp=65g&w



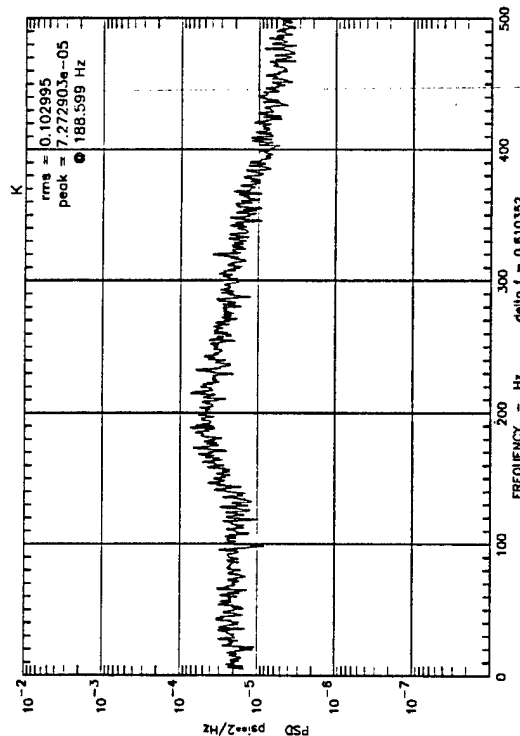
F-15 TPN\_3016: q=56 alpha=24 beta=-4 bp=65g&w



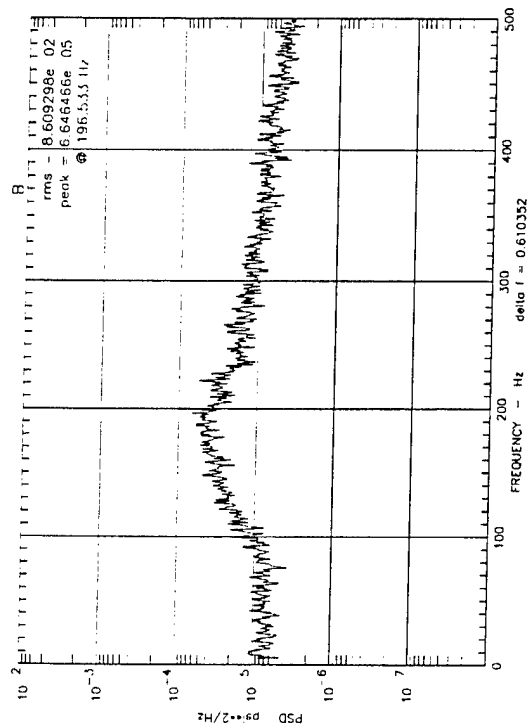
F-15 TPN\_3016: q=56 alpha=24 beta=-4 bp=65g&w



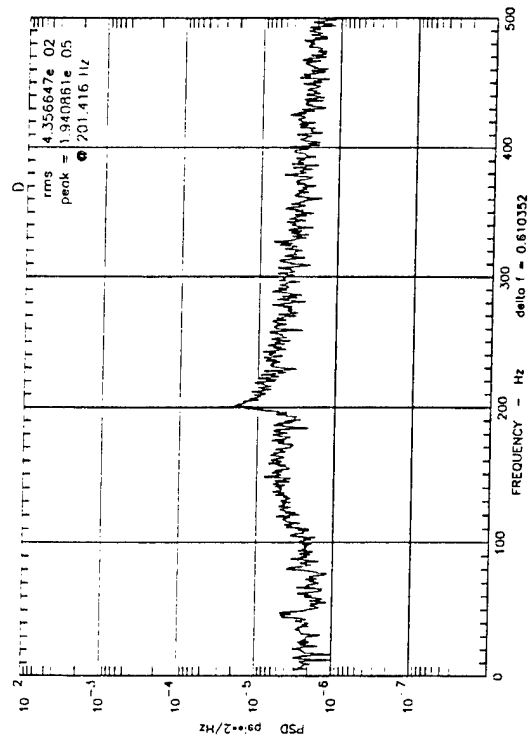
F-15 TPN\_3016: q=56 alpha=24 beta=-4 bp=65g&w



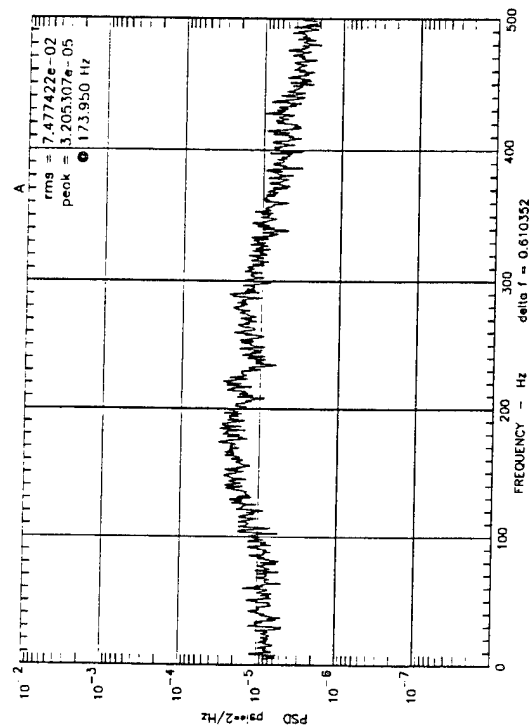
F-15 TPN\_3017: q=56 alpha=26 beta=-4 bp=65g&w



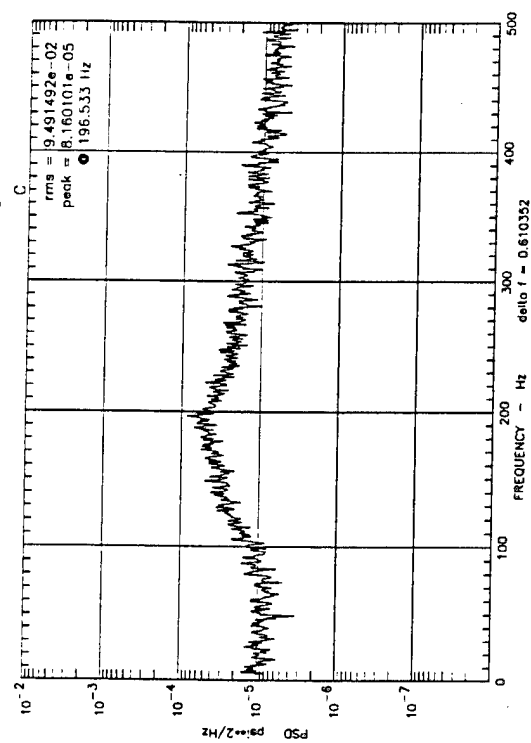
F-15 TPN\_3017: q=56 alpha=26 beta=-4 bp=65g&w



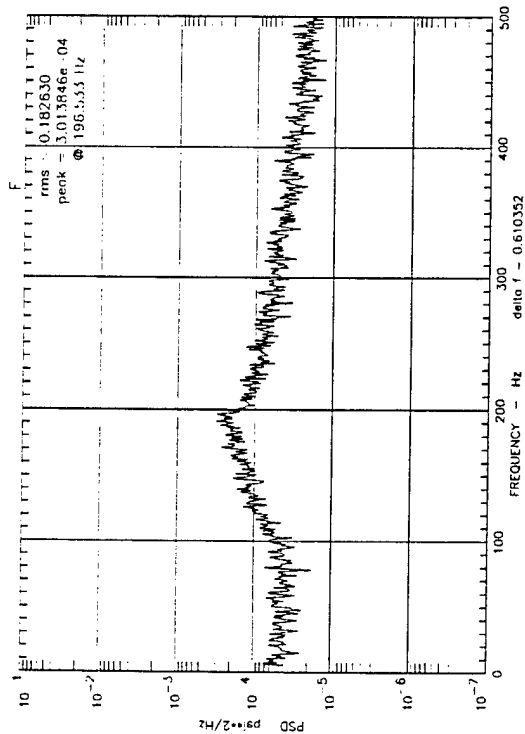
F-15 TPN\_3017: q=56 alpha=26 beta=-4 bp=65g&w



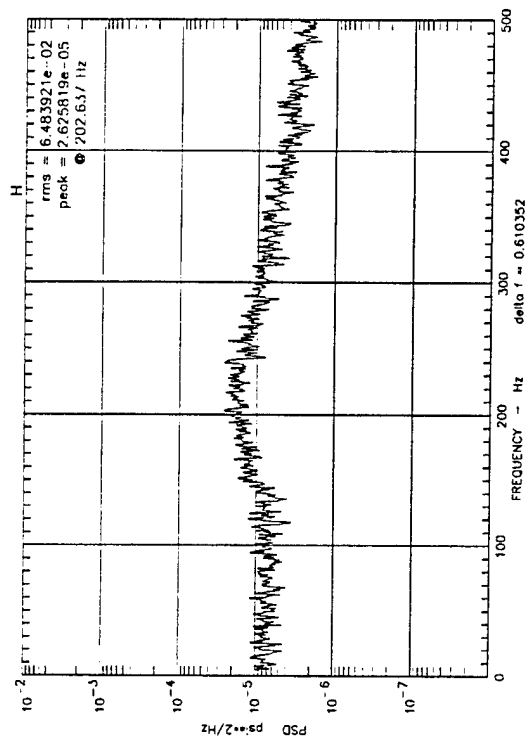
F-15 TPN\_3017: q=56 alpha=26 beta=-4 bp=65g&w



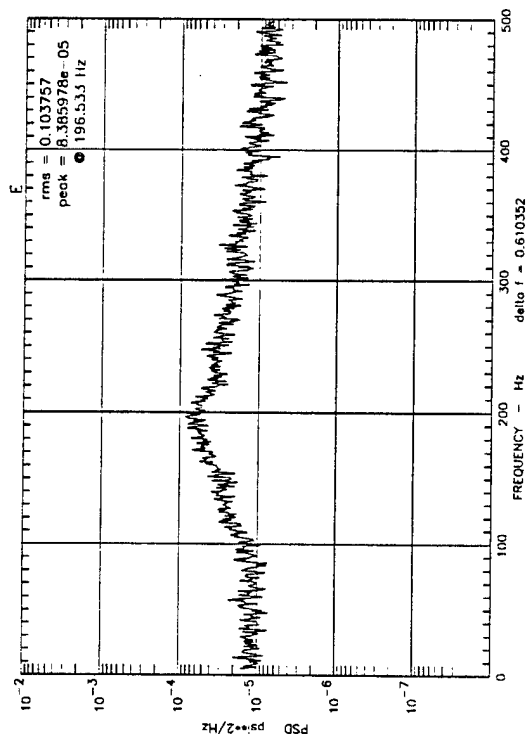
F-15 TPN\_3017: q=56 alpha=26 beta=-4 bp=65g&w



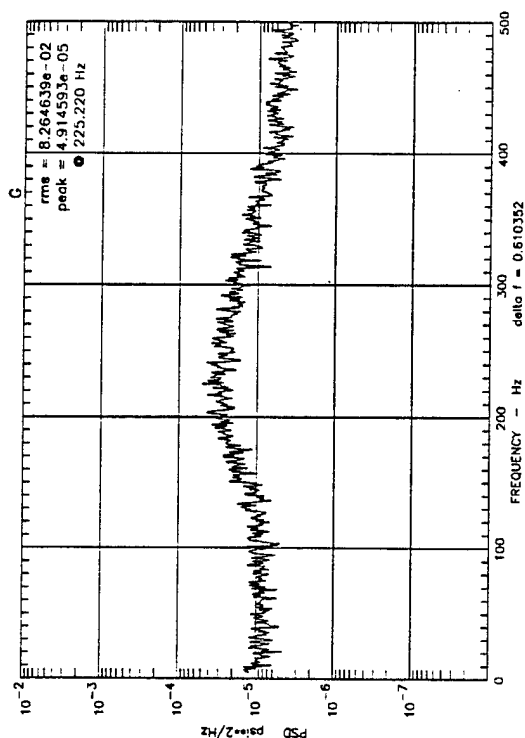
F-15 TPN\_3017: q=56 alpha=26 beta=-4 bp=65g&w



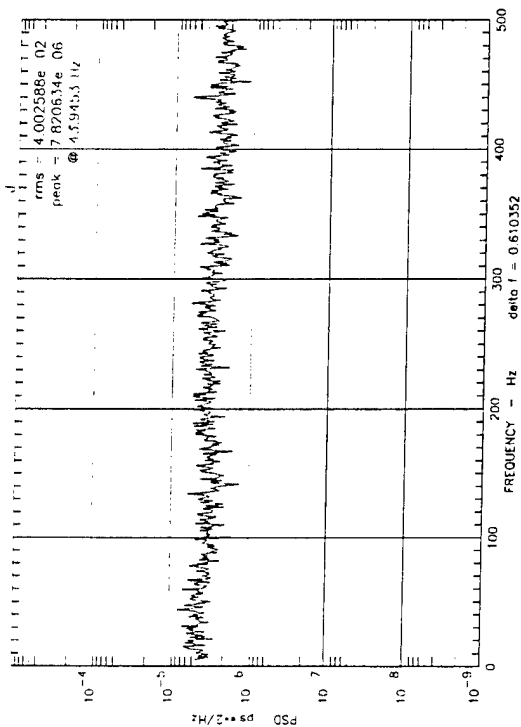
F-15 TPN\_3017: q=56 alpha=26 beta=-4 bp=65g&w



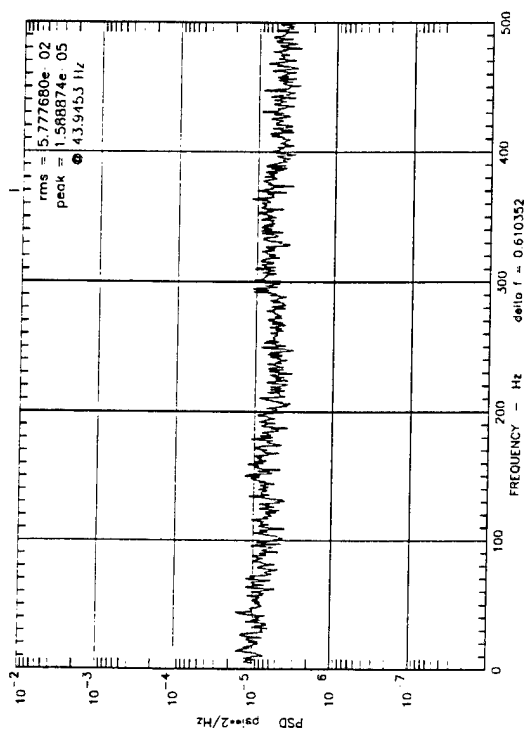
F-15 TPN\_3017: q=56 alpha=26 beta=-4 bp=65g&w



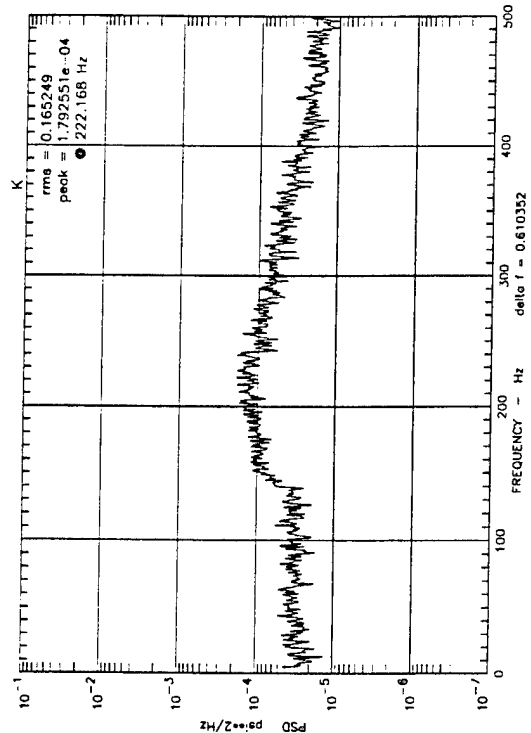
F-15 TPN\_3017: q=56 alpha=26 beta=-4 bp=65g&amp;w



F-15 TPN\_3017: q=56 alpha=26 beta=-4 bp=65g&amp;w



F-15 TPN\_3017: q=56 alpha=26 beta=-4 bp=65g&amp;w



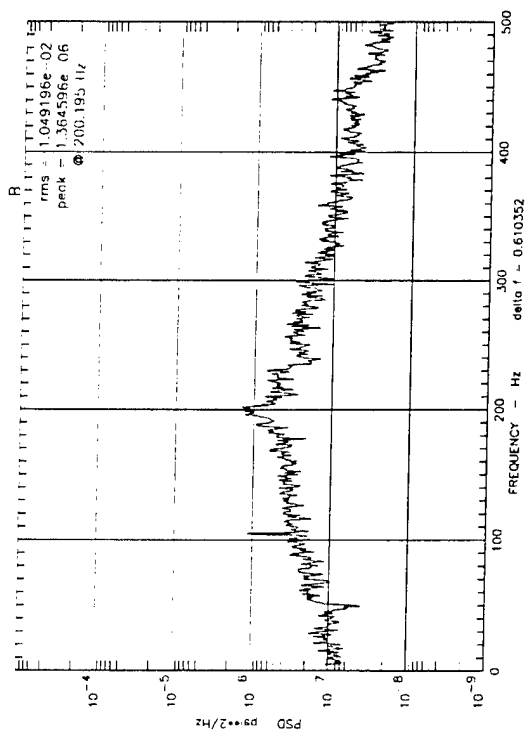
**PRESSURE PSD's**

**Q=56 PSF**

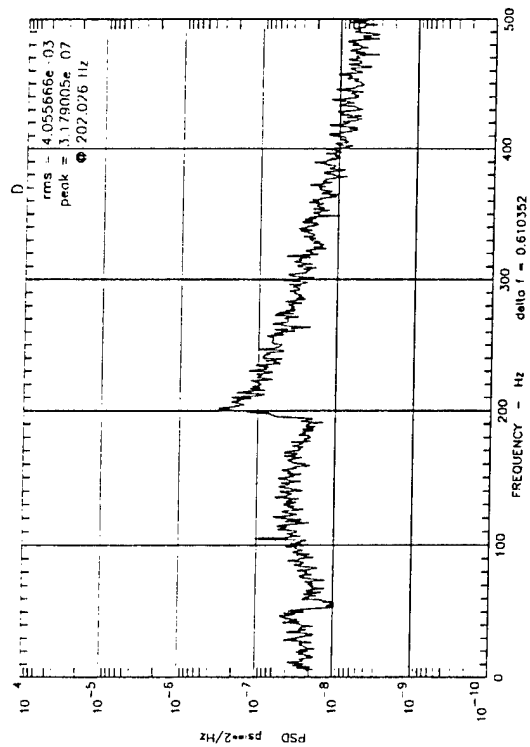
**2.1.2.4 PSD GRAPHS( 5- 500 Hz), NBP = 87 PSI, Beta = 0, +4, -4  
Deg, Alpha = 8...32 Deg**



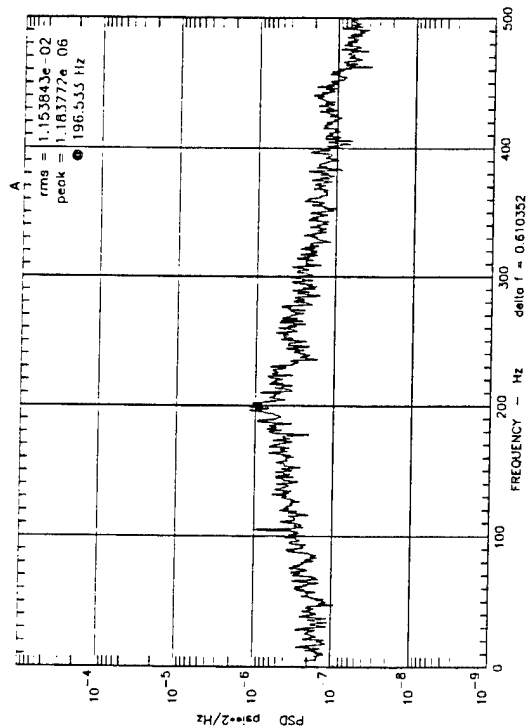
F 15 TPN 3052: q=56 alpha=16 beta=-4 bp@n



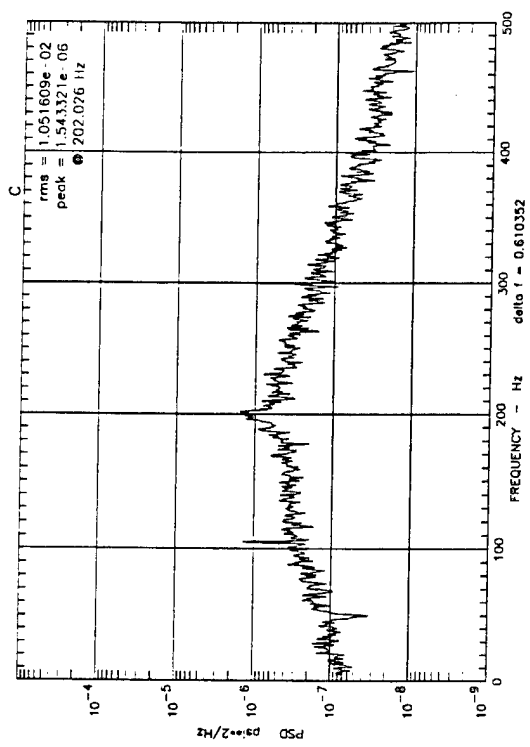
F-15 TPN 3052: q=56 alpha=16 beta=-4 bp@n



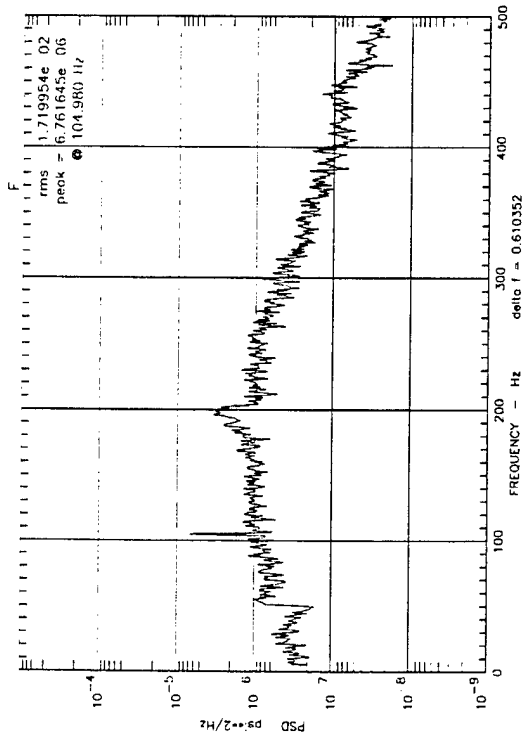
F-15 TPN 3052: q=56 alpha=16 beta=-4 bp@n



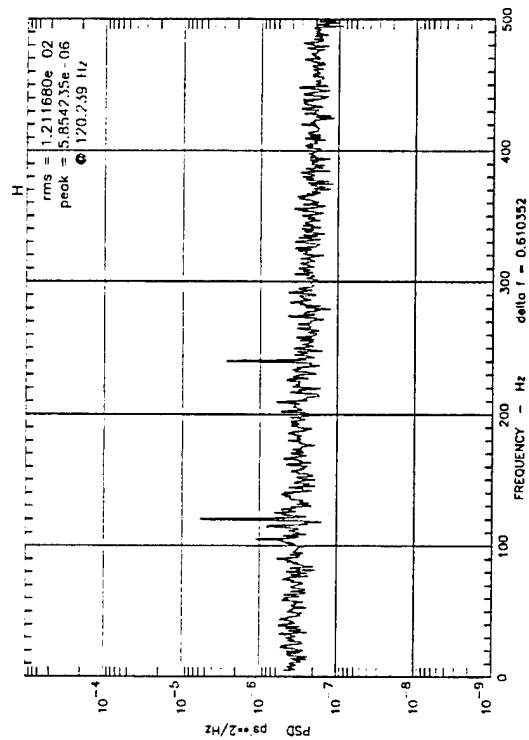
F-15 TPN 3052: q=56 alpha=16 beta=-4 bp@n



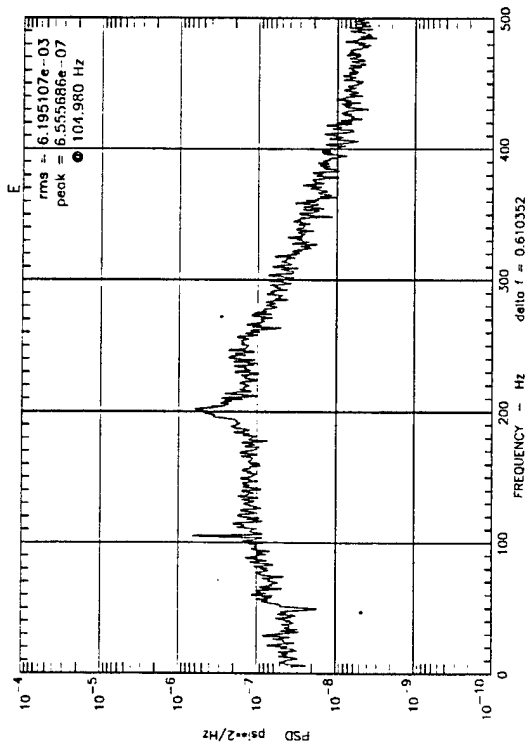
F-15 TPN\_3052: q=56 alpha=16 beta=-4 bp@n



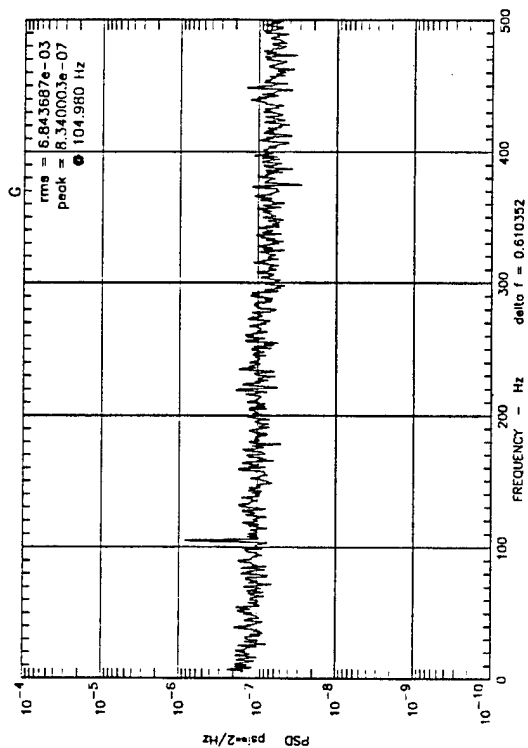
F-15 TPN\_3052: q=56 alpha=16 beta=-4 bp@n

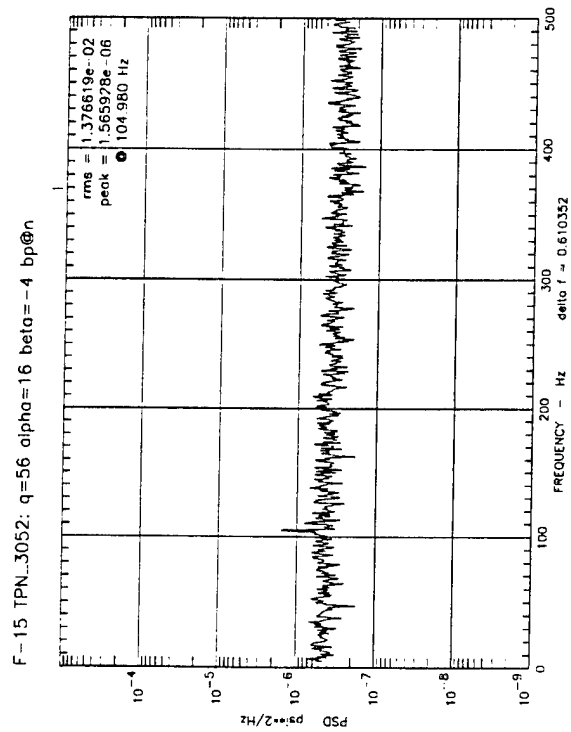
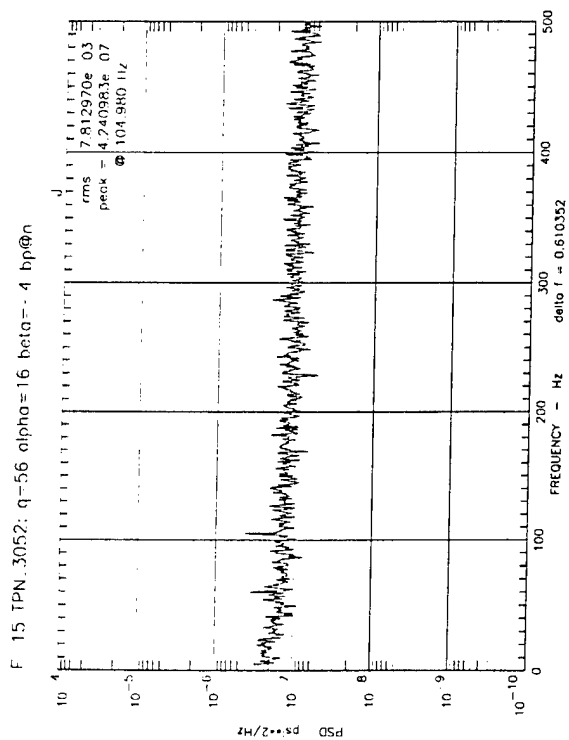


F-15 TPN\_3052: q=56 alpha=16 beta=-4 bp@n

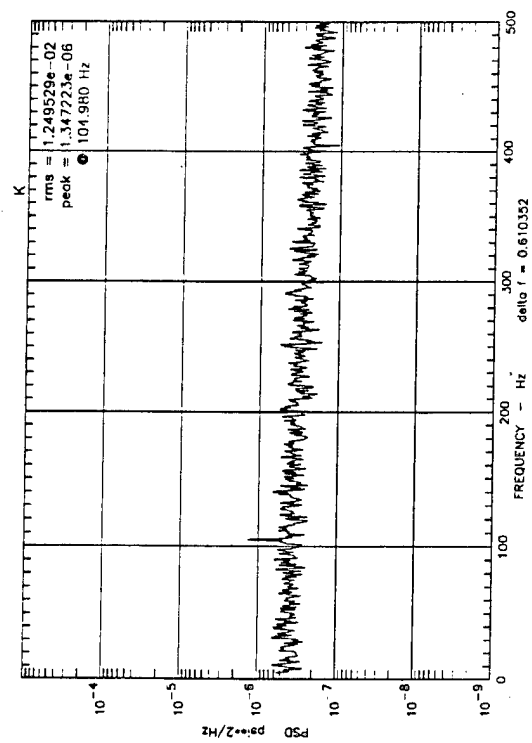


F-15 TPN\_3052: q=56 alpha=16 beta=-4 bp@n

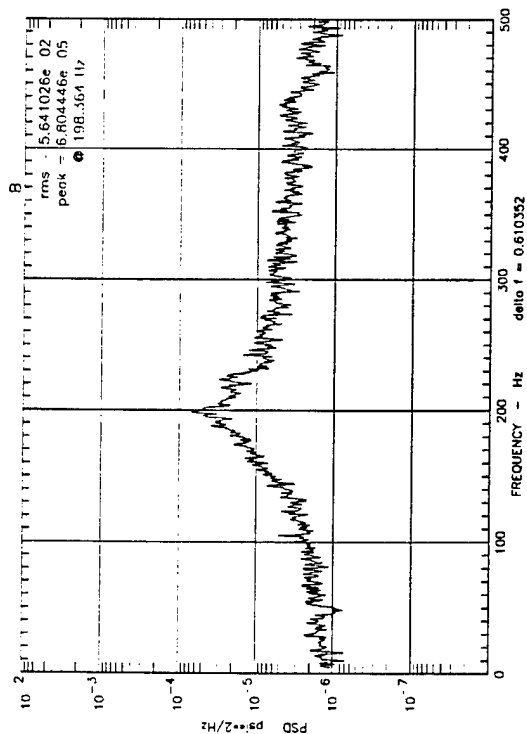




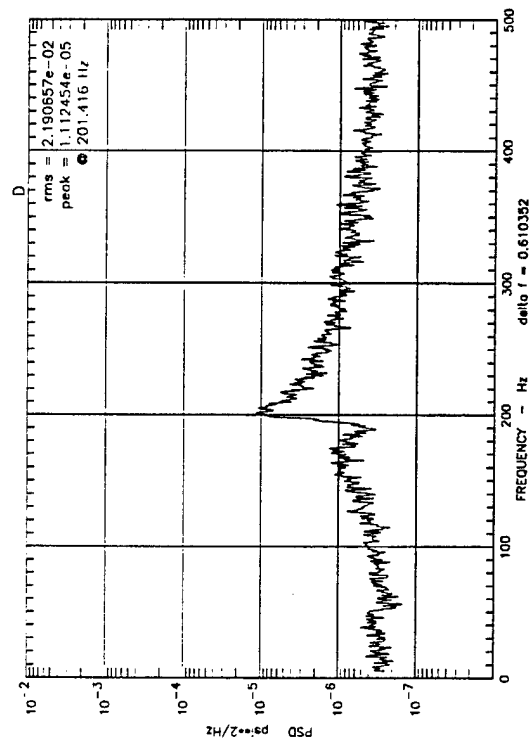
F 15 TPN\_3052: q=56 alpha=16 beta=-4 bp@n



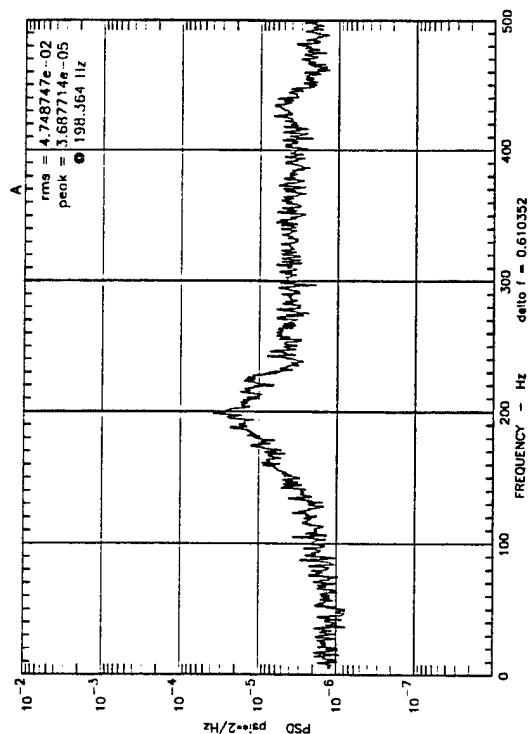
F-15 TPN\_3054: q=56 alpha=20 beta=-4 bp@n



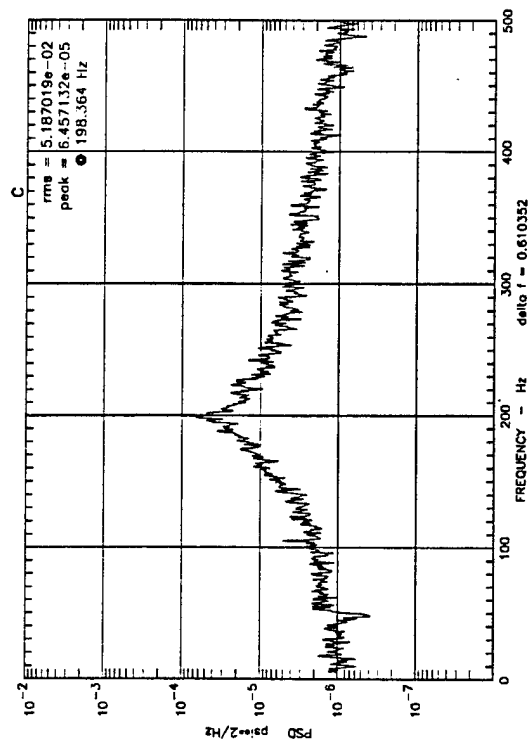
F-15 TPN\_3054: q=56 alpha=20 beta=-4 bp@n



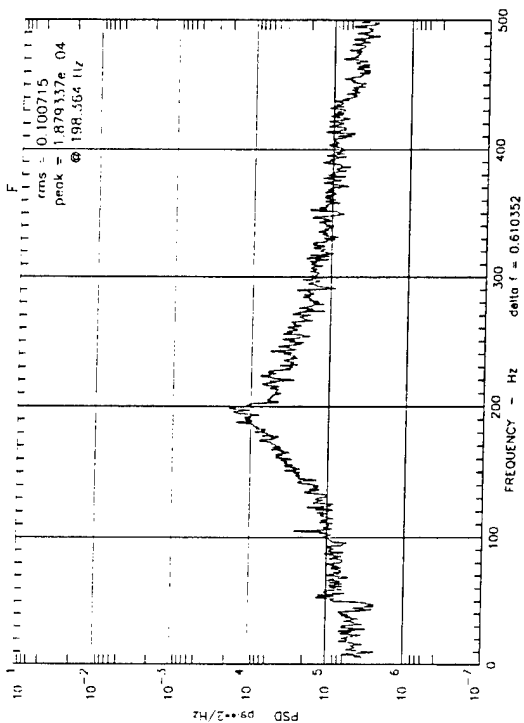
F-15 TPN\_3054: q=56 alpha=20 beta=-4 bp@n



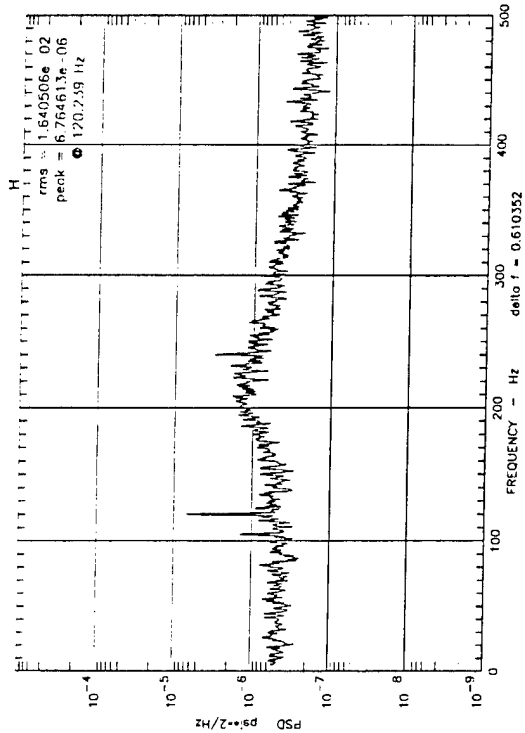
F-15 TPN\_3054: q=56 alpha=20 beta=-4 bp@n



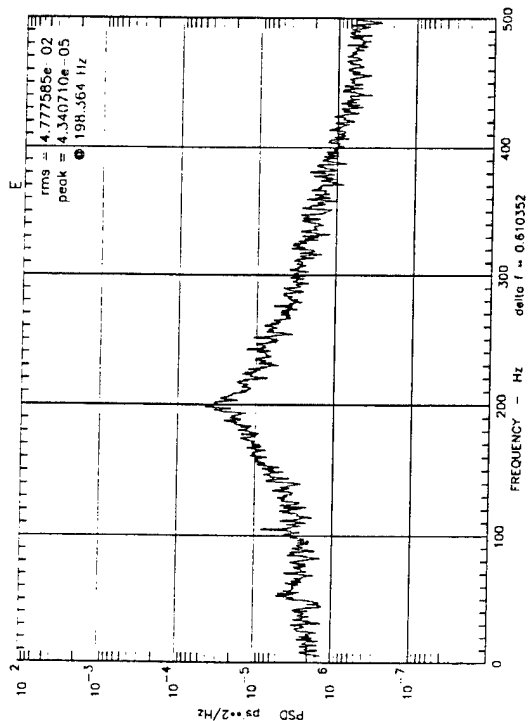
F 15 TPN .3054: q=56 alpha=20 beta=-4 bp@n



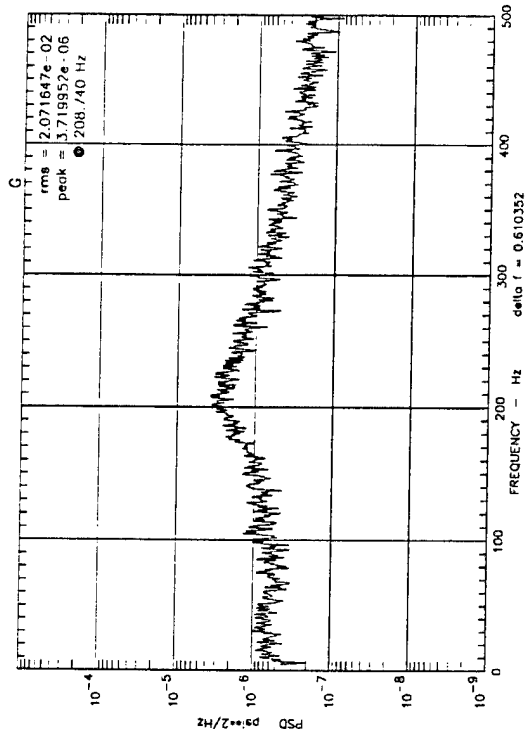
F 15 TPN .3054: q=56 alpha=20 beta=-4 bp@n



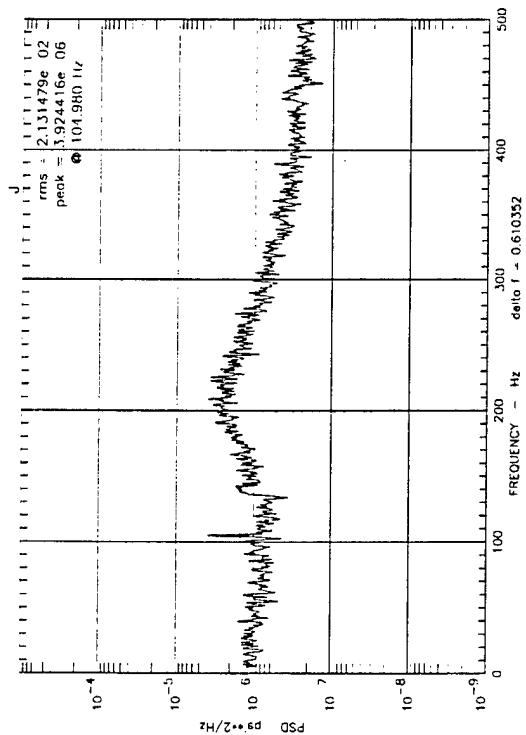
F 15 TPN .3054: q=56 alpha=20 beta=-4 bp@n



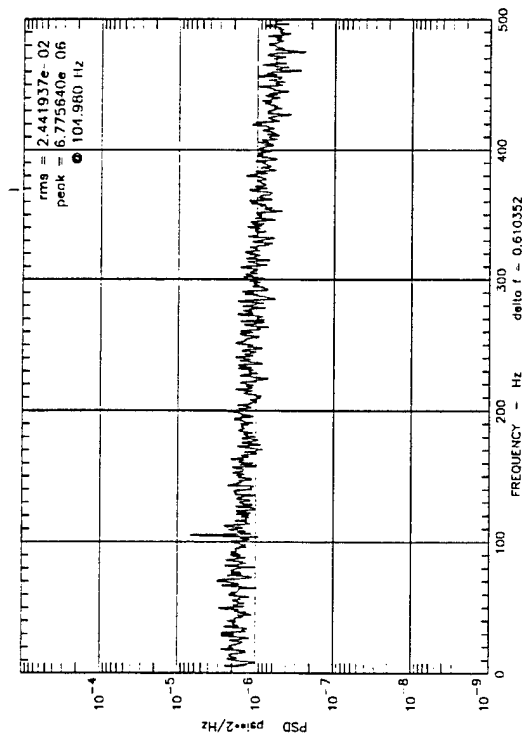
F 15 TPN .3054: q=56 alpha=20 beta=-4 bp@n



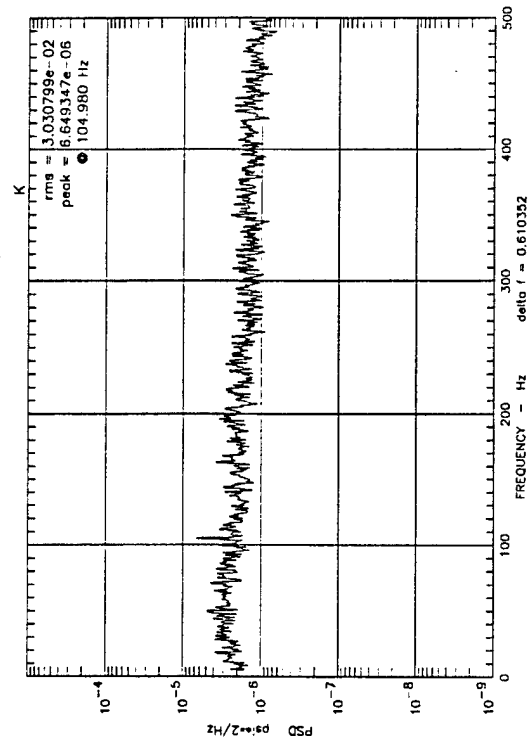
F 15 TPN\_3054: q=56 alpha=20 beta=-4 bp@n



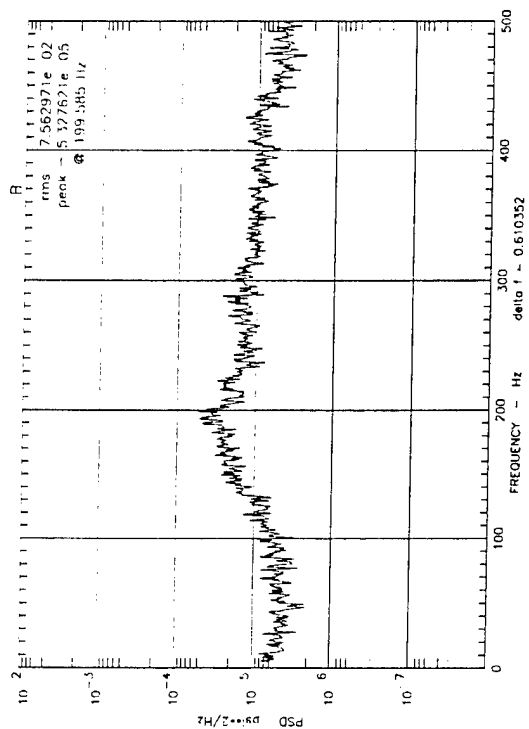
F 15 TPN\_3054: q=56 alpha=20 beta=-4 bp@n



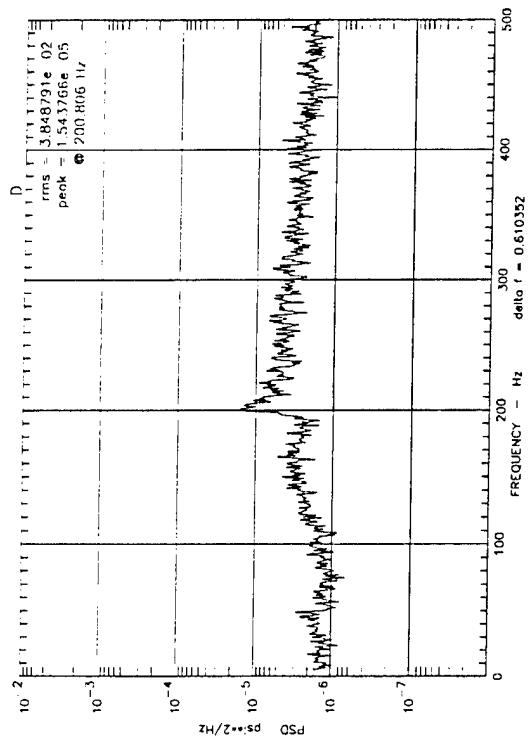
F 15 TPN\_3054: q=56 alpha=20 beta=-4 bp@n



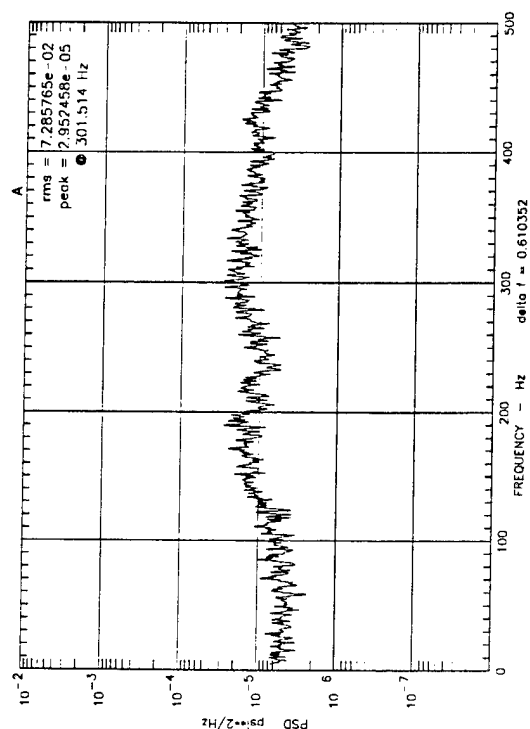
F-15 TPN\_3056: q=56 alpha=24 beta=-4 bp@n



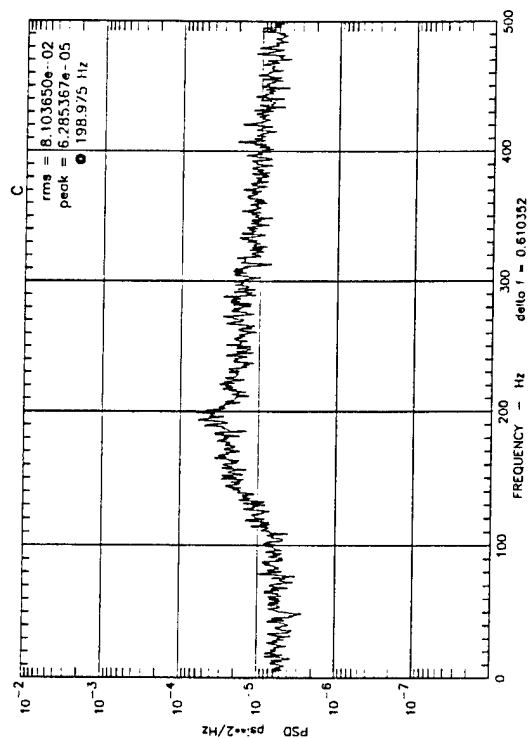
F-15 TPN\_3056: q=56 alpha=24 beta=-4 bp@n



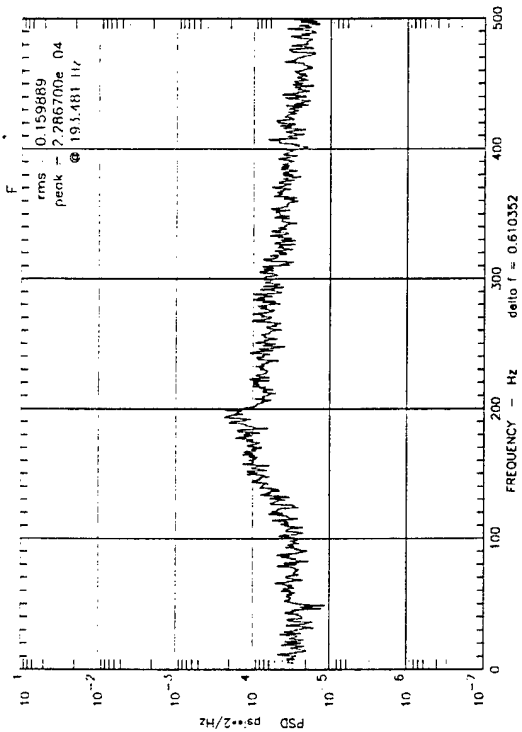
F-15 TPN\_3056: q=56 alpha=24 beta=-4 bp@n



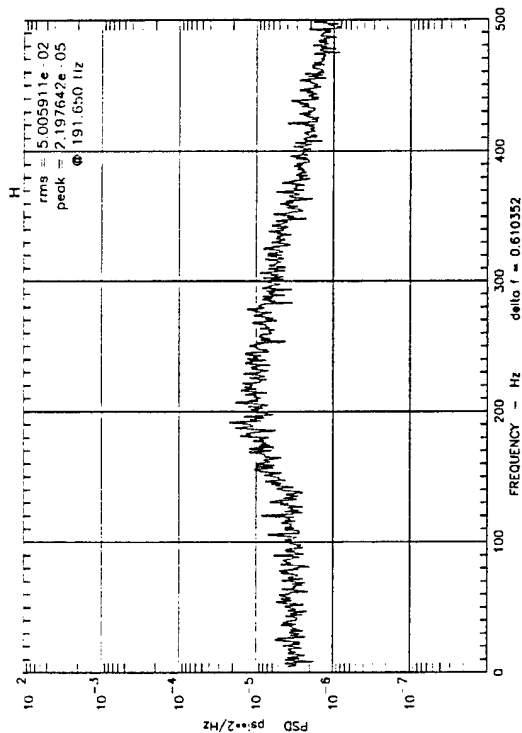
F-15 TPN\_3056: q=56 alpha=24 beta=-4 bp@n



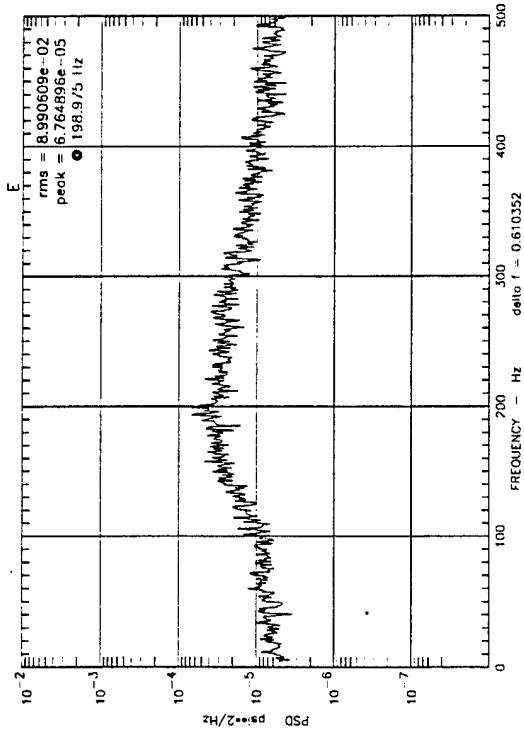
F-15 TPN 3056: q=56 alpha=24 beta=-4 bp@n



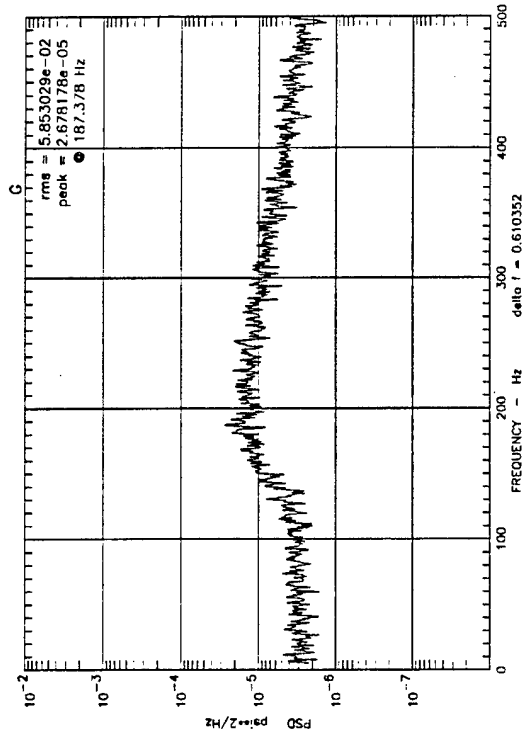
F-15 TPN 3056: q=56 alpha=24 beta=-4 bp@n



F-15 TPN 3056: q=56 alpha=24 beta=-4 bp@n

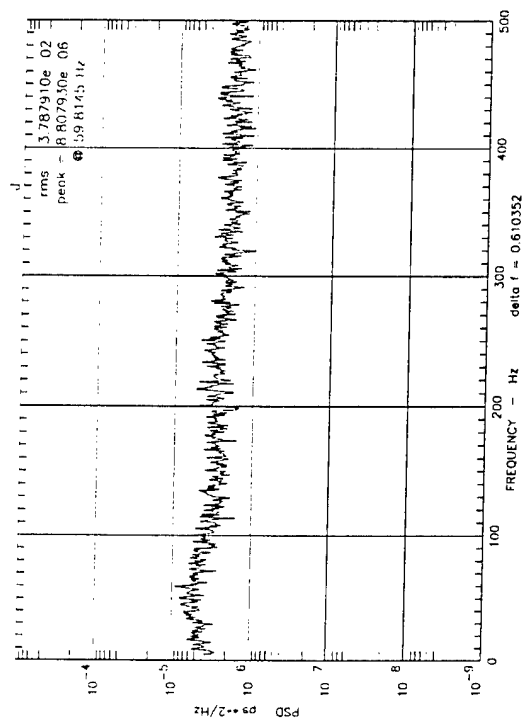


F-15 TPN 3056: q=56 alpha=24 beta=-4 bp@n

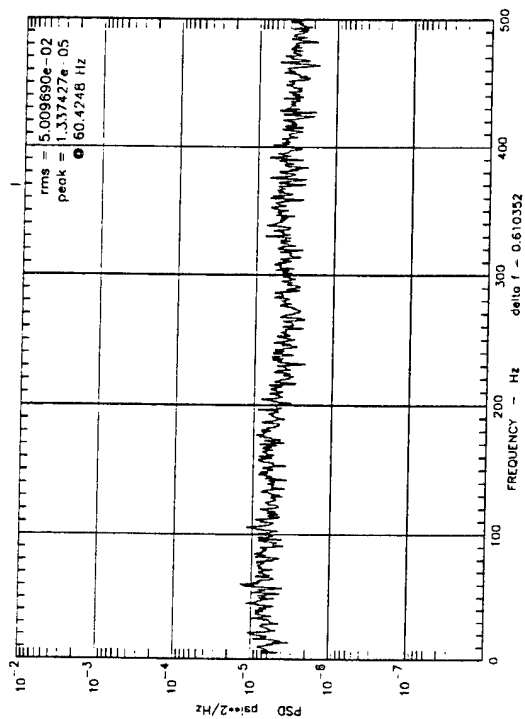




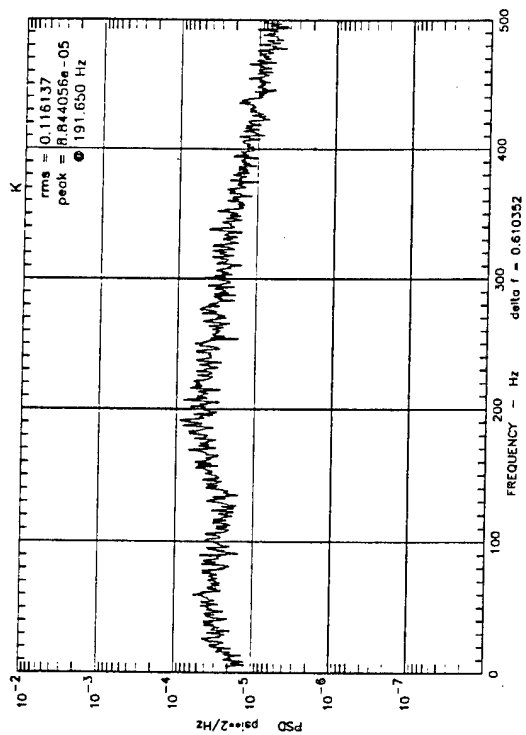
F-15 TPN\_3056: q=56 alpha=24 beta=-4 bp@n



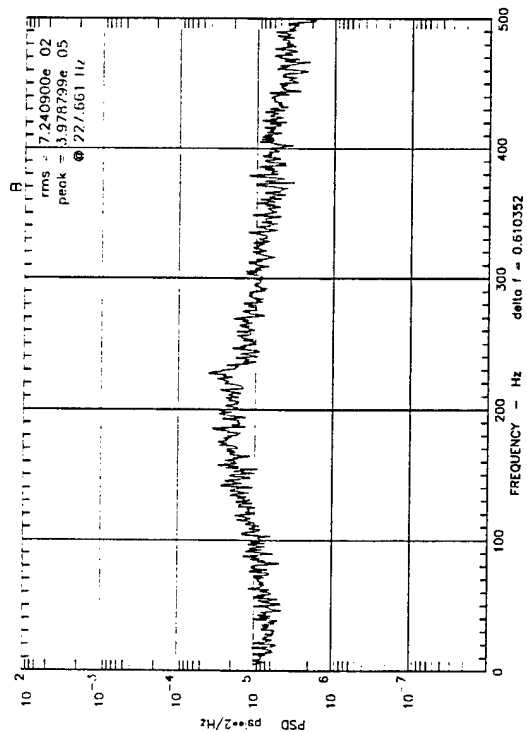
F-15 TPN\_3056: q=56 alpha=24 beta=-4 bp@n



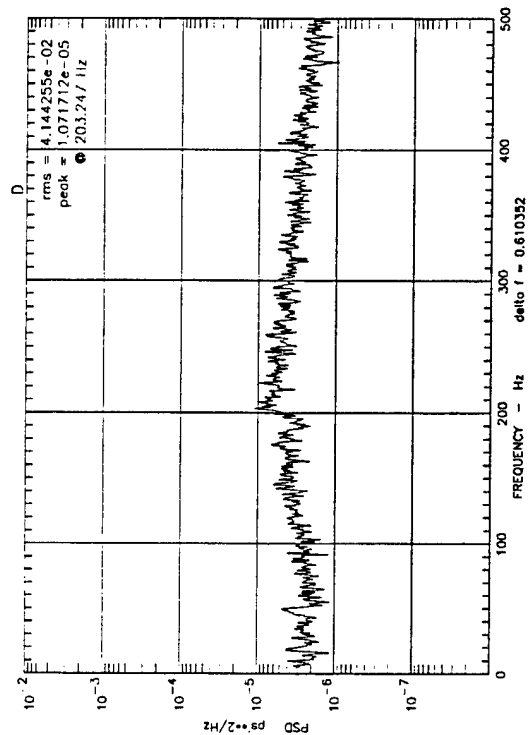
F-15 TPN\_3056: q=56 alpha=24 beta=-4 bp@n



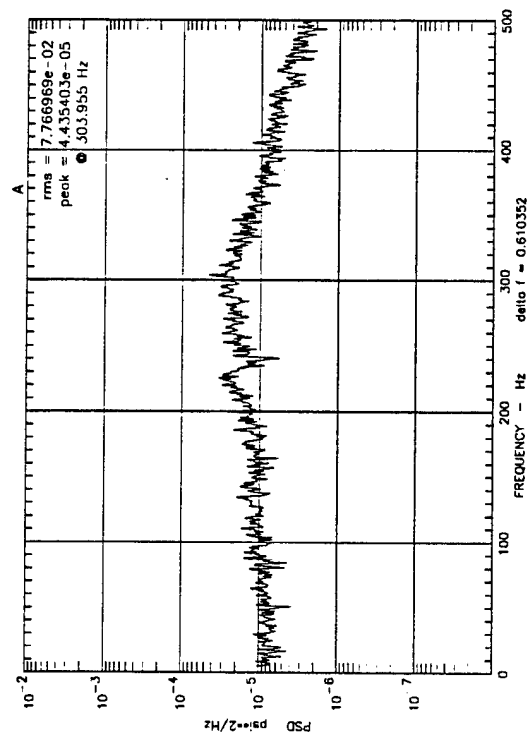
F-15 TPN\_3057: q=56 alpha=26 beta=-4 bp@n



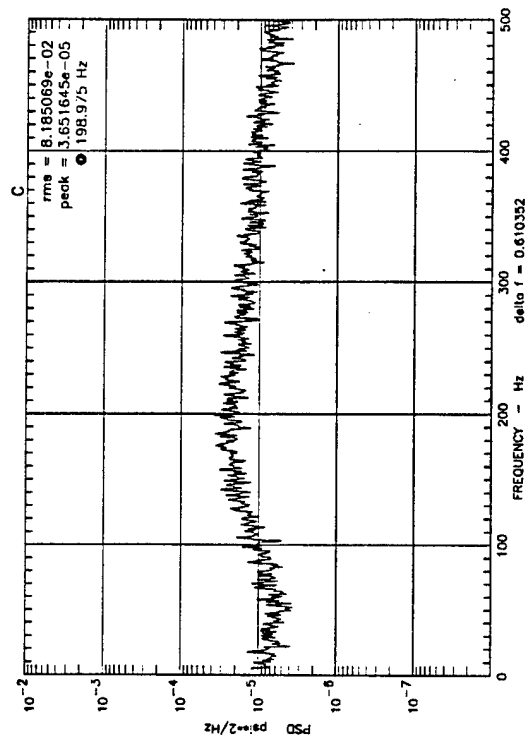
F-15 TPN\_3057: q=56 alpha=26 beta=-4 bp@n



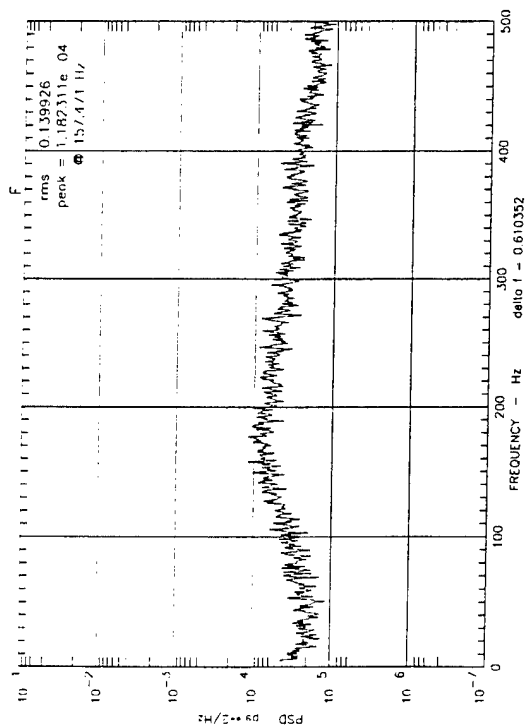
F-15 TPN\_3057: q=56 alpha=26 beta=-4 bp@n



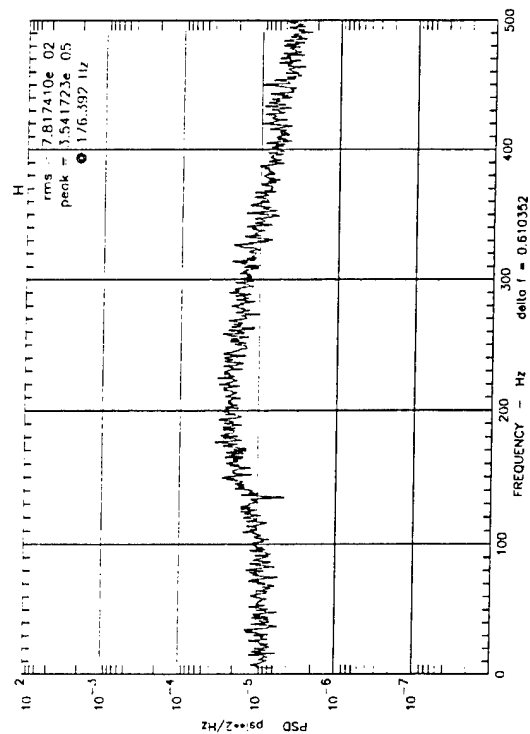
F-15 TPN\_3057: q=56 alpha=26 beta=-4 bp@n



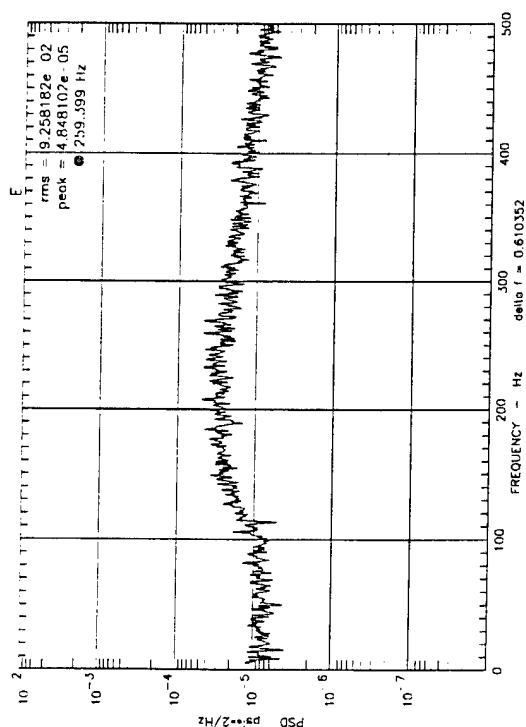
F 15 IPN 3057: q=56 alpha=26 beta=-4 bp@n



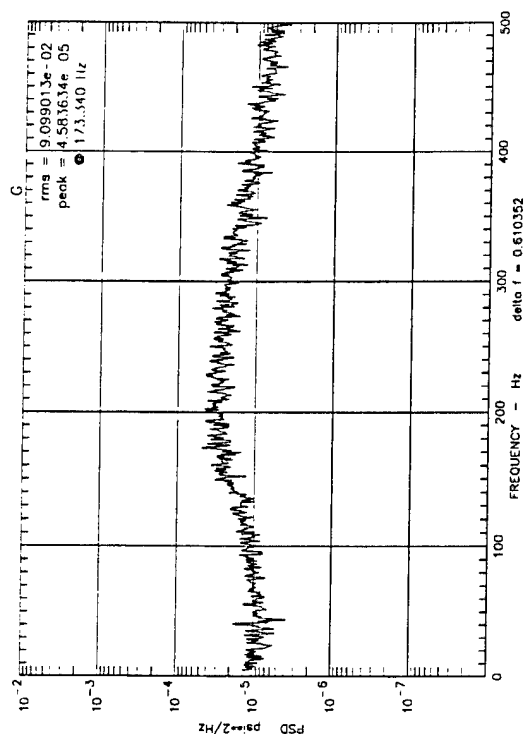
F 15 IPN 3057: q=56 alpha=26 beta=-4 bp@n



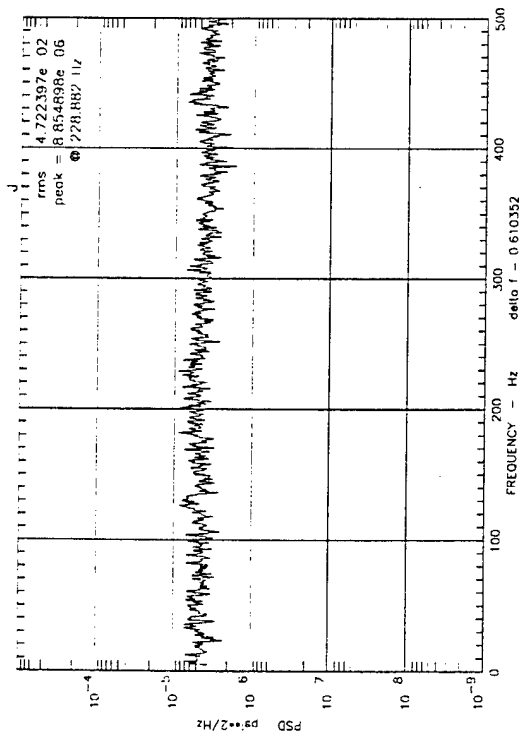
F 15 IPN 3057: q=56 alpha=26 beta=-4 bp@n



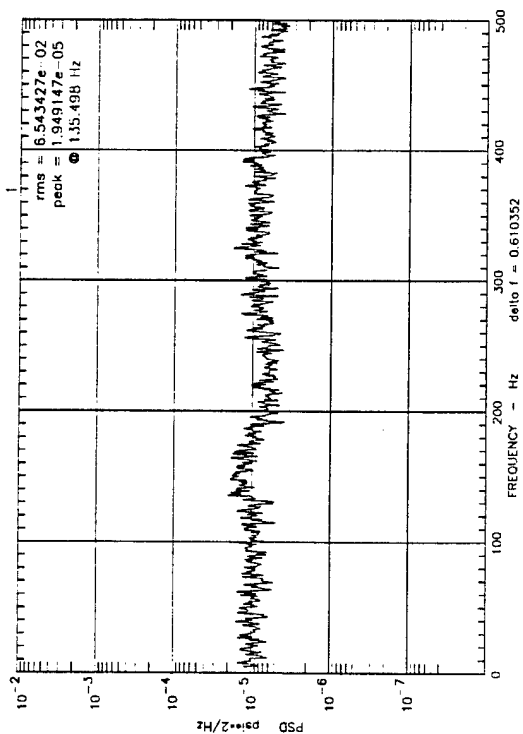
F 15 IPN 3057: q=56 alpha=26 beta=-4 bp@n



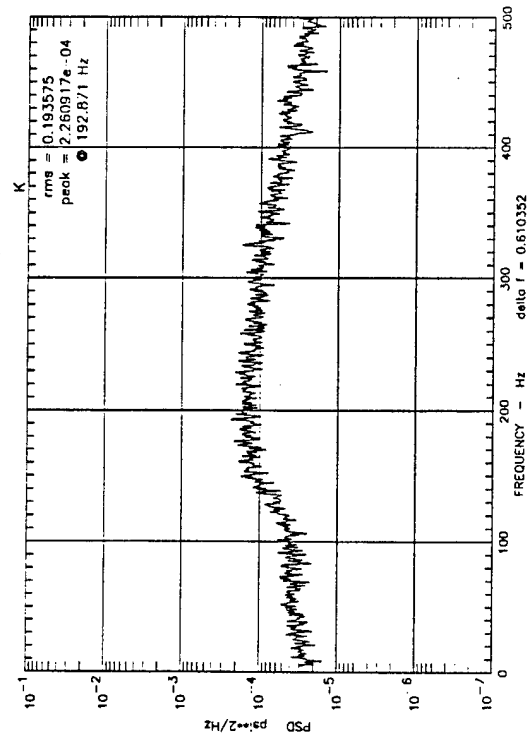
F-15 TPN\_3057: q=56 alpha=26 beta=-4 bp@n



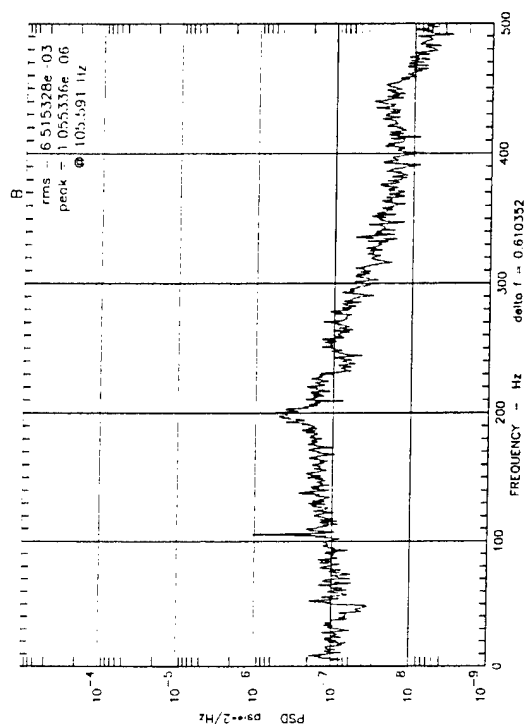
F-15 TPN\_3057: q=56 alpha=26 beta=-4 bp@n



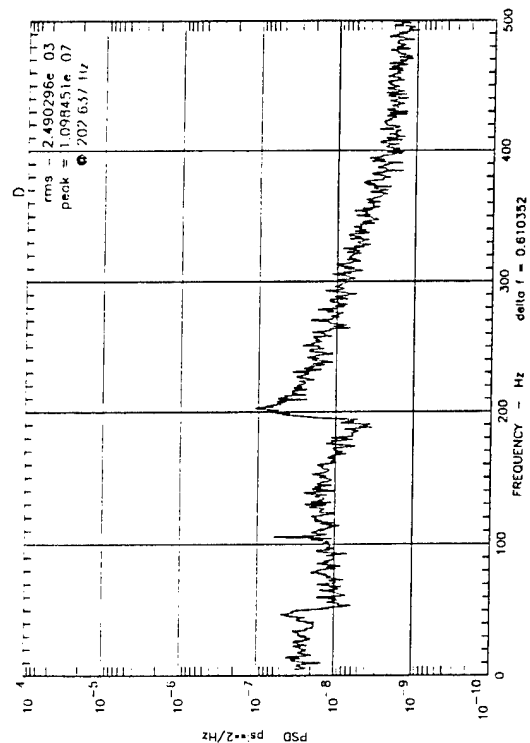
F-15 TPN\_3057: q=56 alpha=26 beta=-4 bp@n



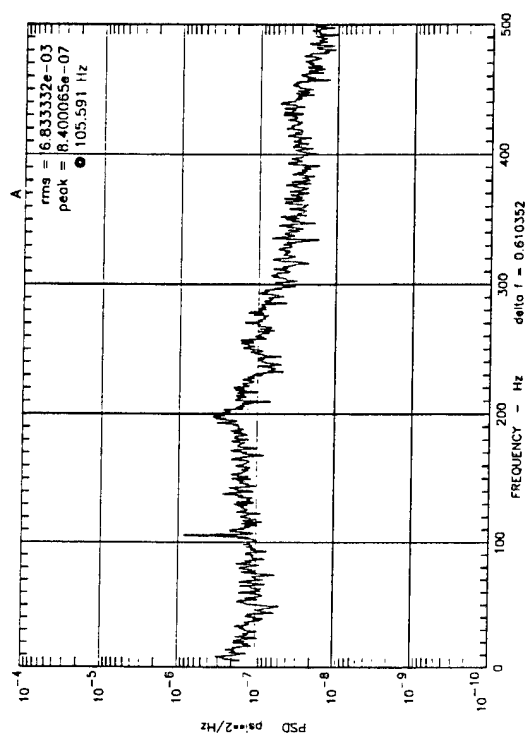
F-15 TPN\_305B: q=56 alpha=16 beta=0 bp@n



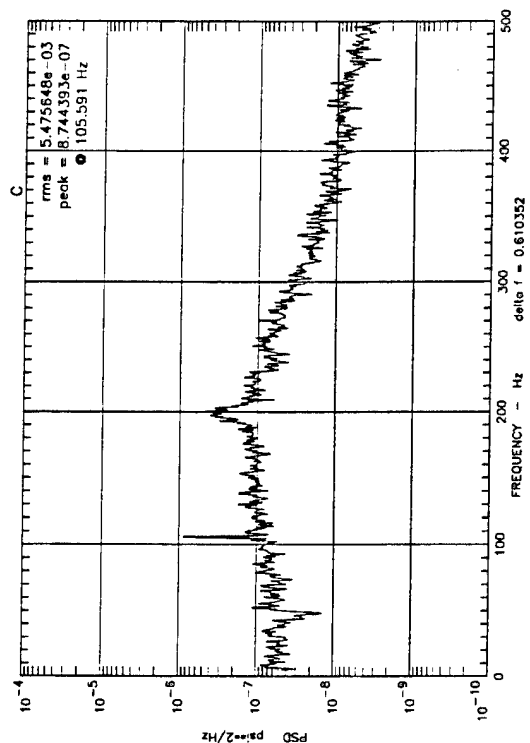
F-15 TPN\_305B: q=56 alpha=16 beta=0 bp@n



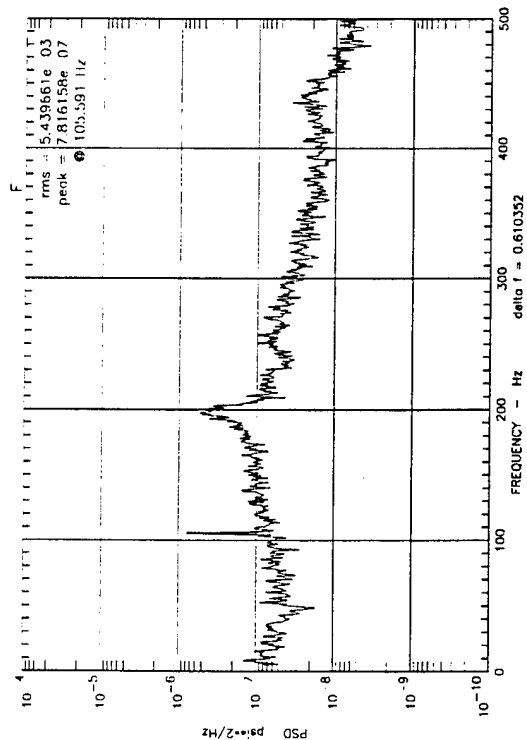
F-15 TPN\_305B: q=56 alpha=16 beta=0 bp@n



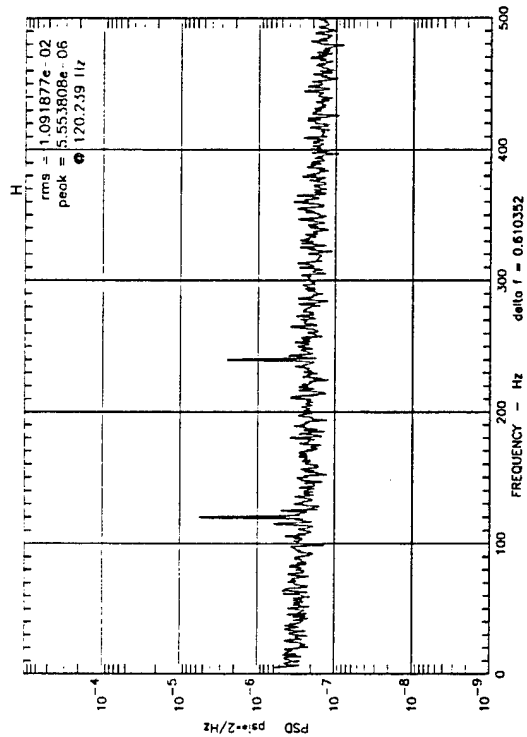
F-15 TPN\_305B: q=56 alpha=16 beta=0 bp@n



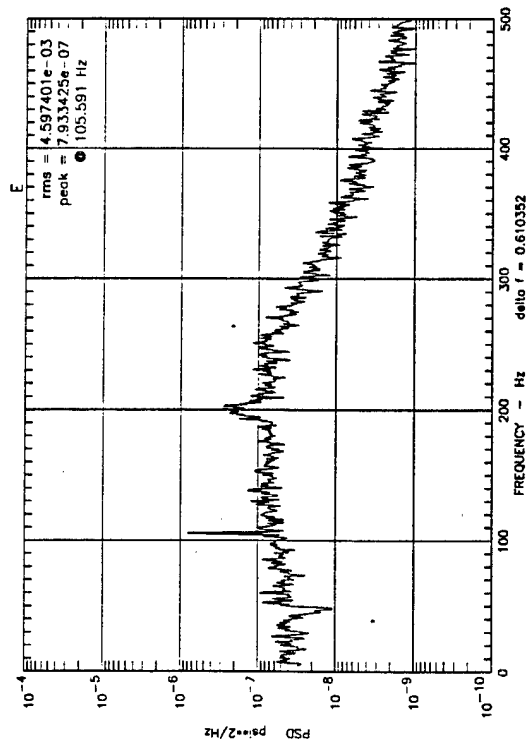
F-15 TPN\_3058: q=56 alpha=16 beta=0 bp@n



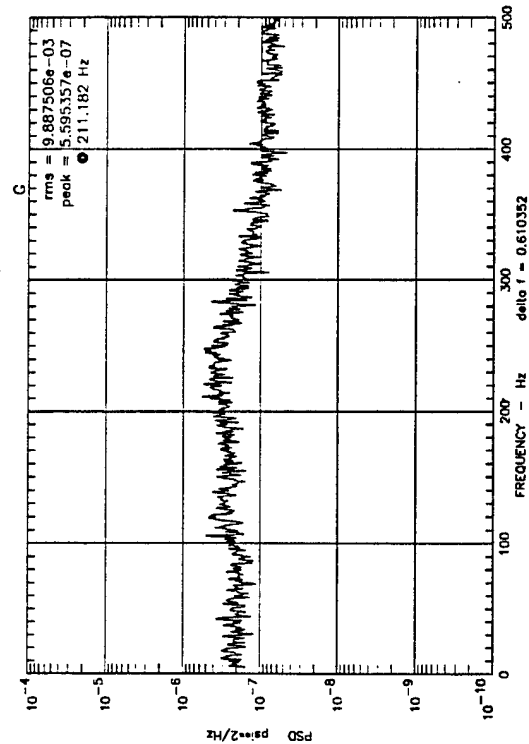
F-15 TPN\_3058: q=56 alpha=16 beta=0 bp@n



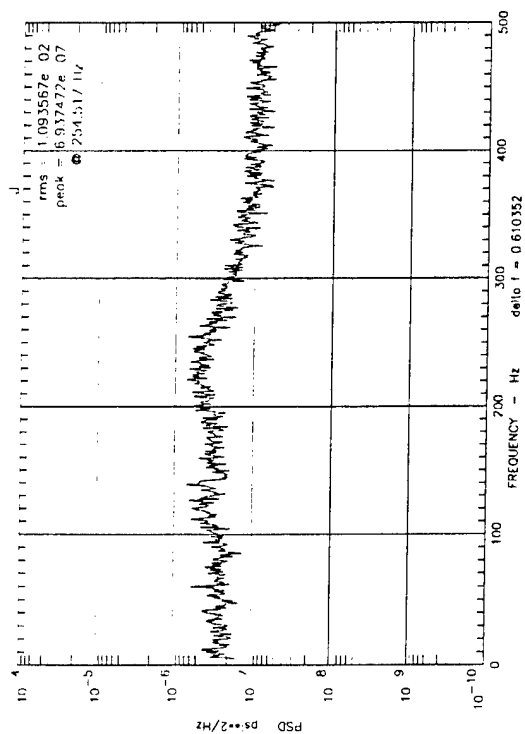
F-15 TPN\_3058: q=56 alpha=16 beta=0 bp@n



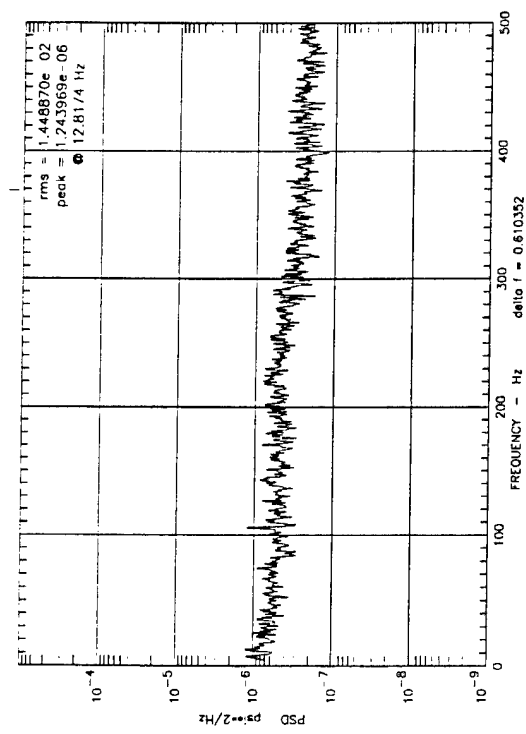
F-15 TPN\_3058: q=56 alpha=16 beta=0 bp@n



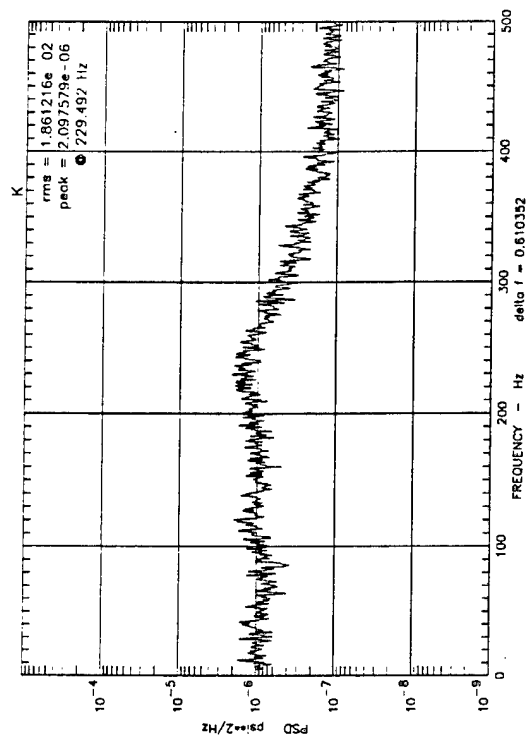
F-15 TPN-3058: q=56 alpha=16 beta=0 bp@n



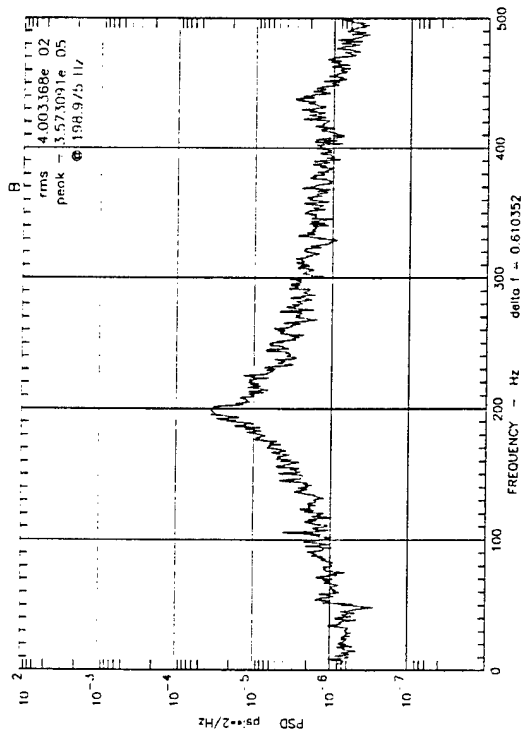
F-15 TPN-3058: q=56 alpha=16 beta=0 bp@n



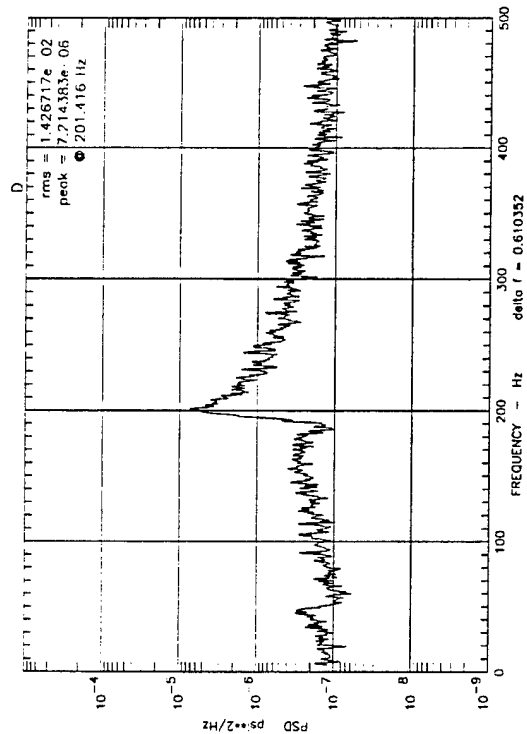
F-15 TPN-3058: q=56 alpha=16 beta=0 bp@n



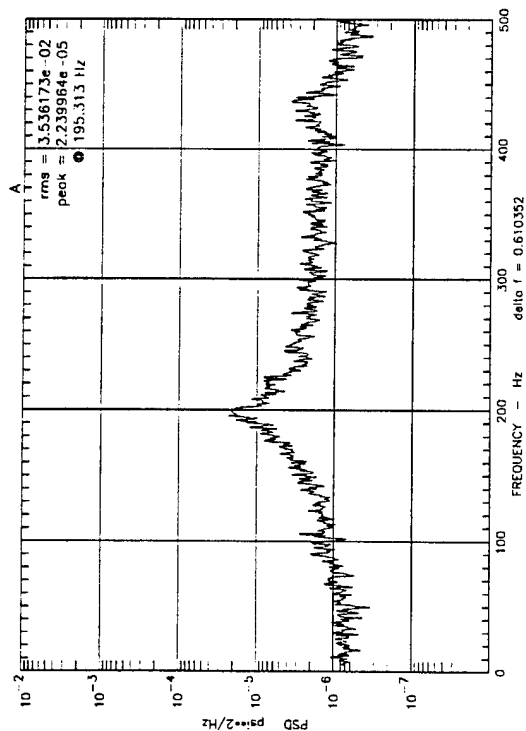
F-15 TPN\_3060: q=56 alpha=20 beta=0 bp@n



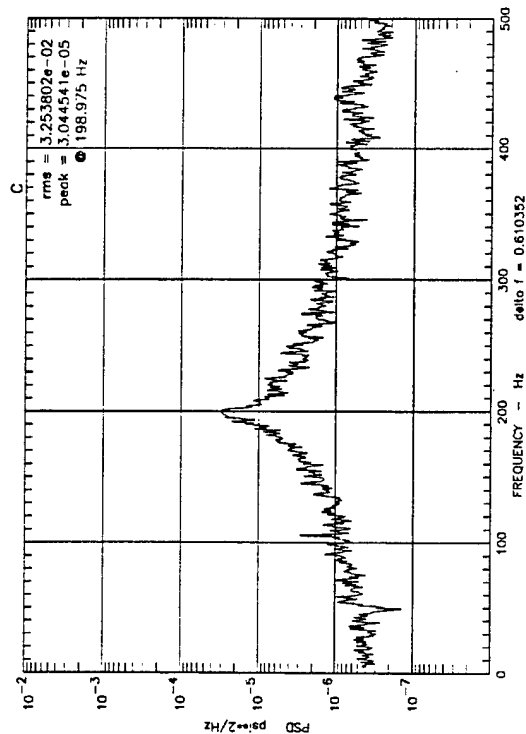
F-15 TPN\_3060: q=56 alpha=20 beta=0 bp@n



F-15 TPN\_3060: q=56 alpha=20 beta=0 bp@n

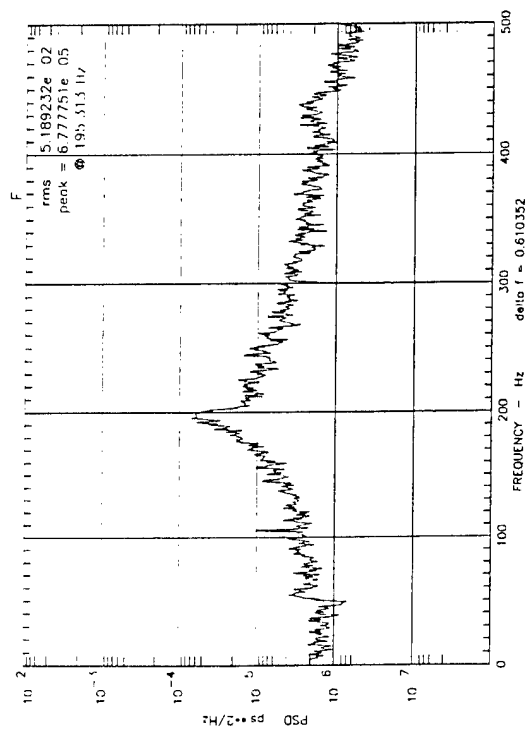


F-15 TPN\_3060: q=56 alpha=20 beta=0 bp@n

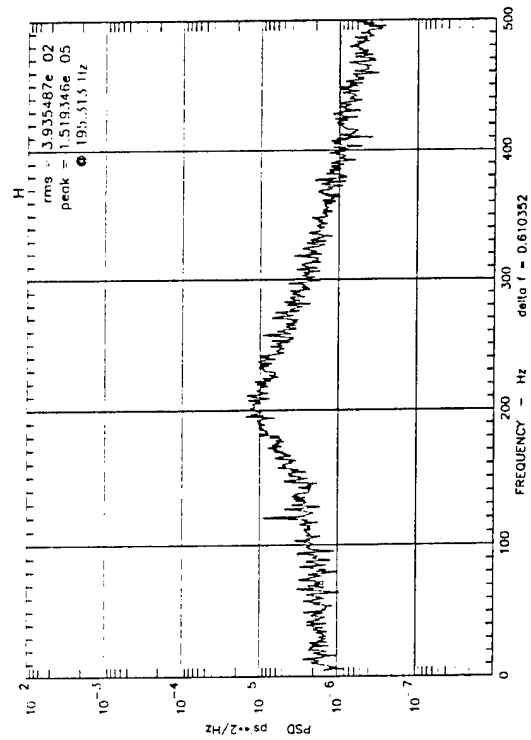




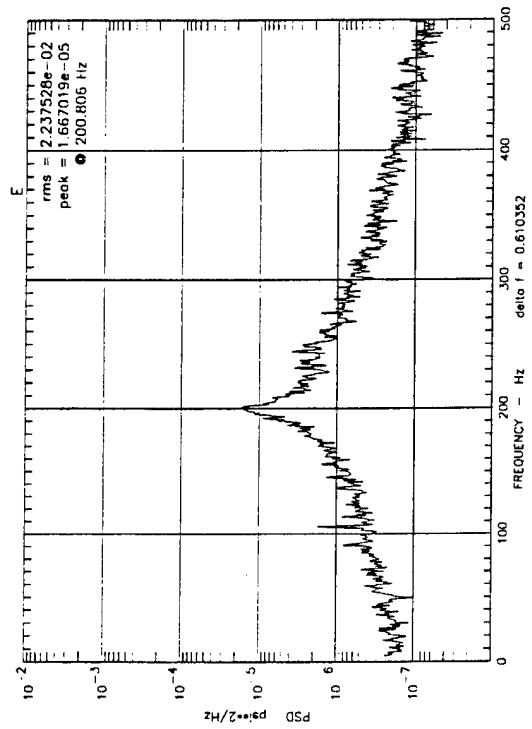
F-15 TPN\_3060: q=56 alpha=20 beta=0 bp@n



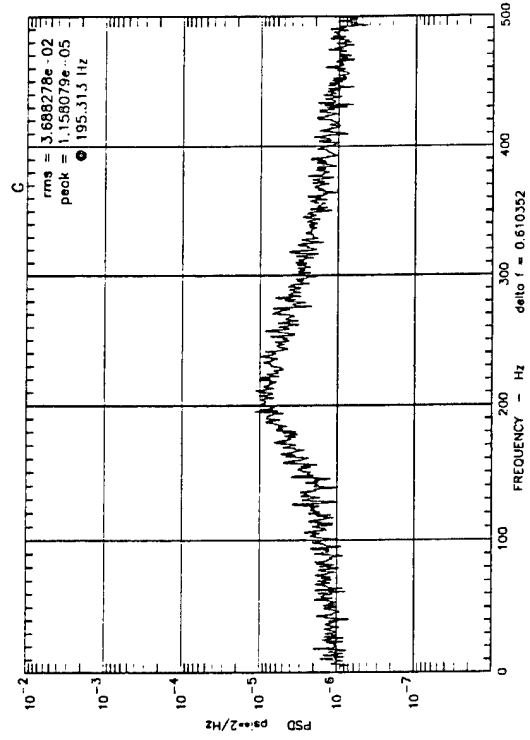
F-15 TPN\_3060: q=56 alpha=20 beta=0 bp@n



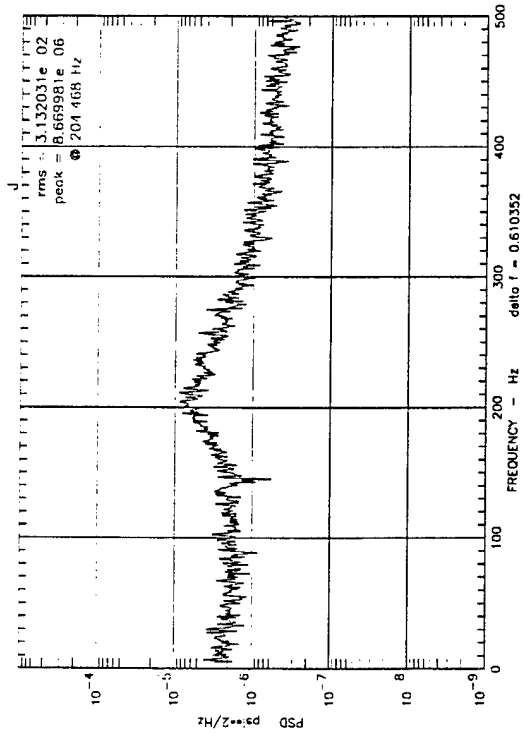
F-15 TPN\_3060: q=56 alpha=20 beta=0 bp@n



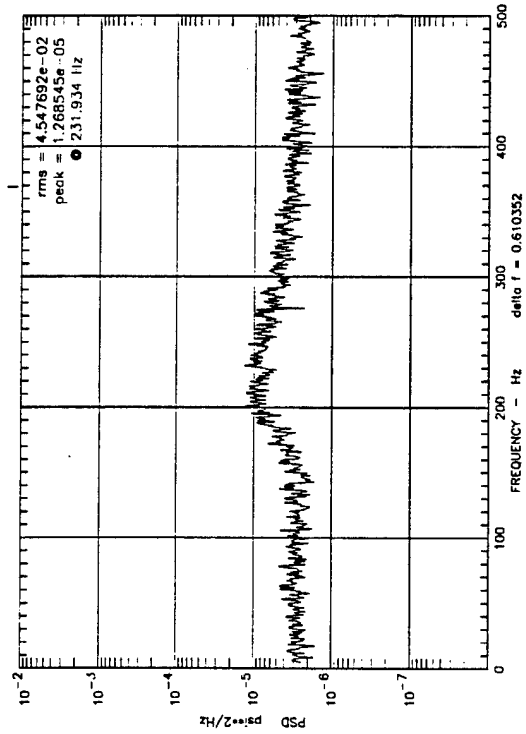
F-15 TPN\_3060: q=56 alpha=20 beta=0 bp@n



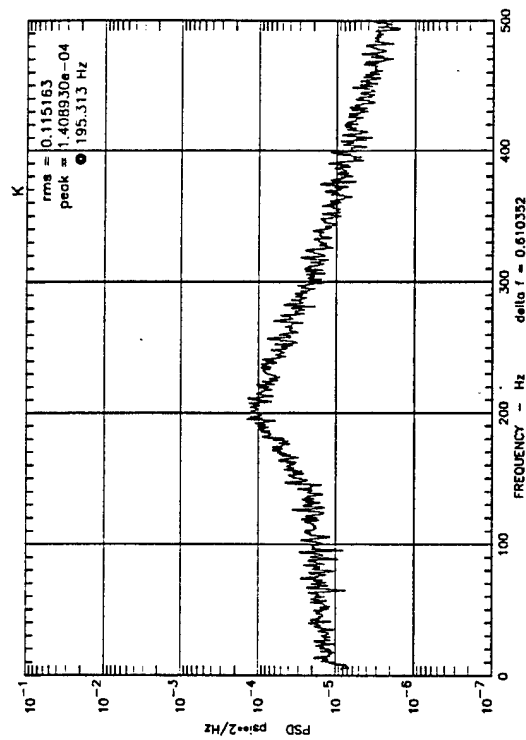
F-15 TPN\_3060: q=56 alpha=20 beta=0 bp@n



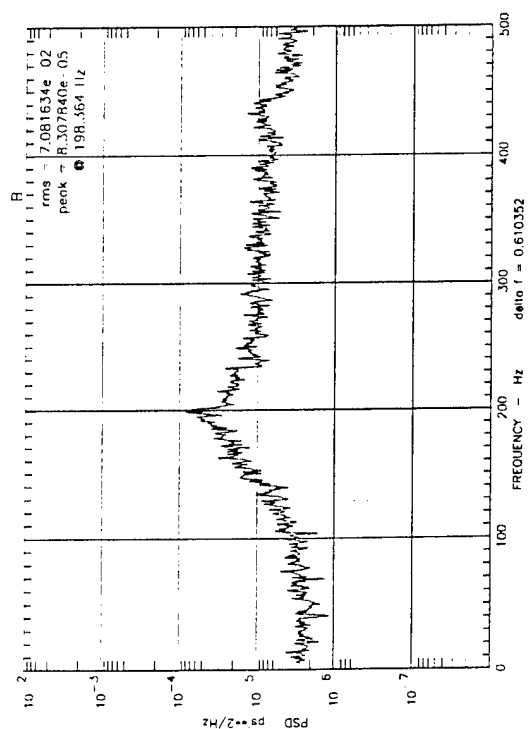
F-15 TPN\_3060: q=56 alpha=20 beta=0 bp@n



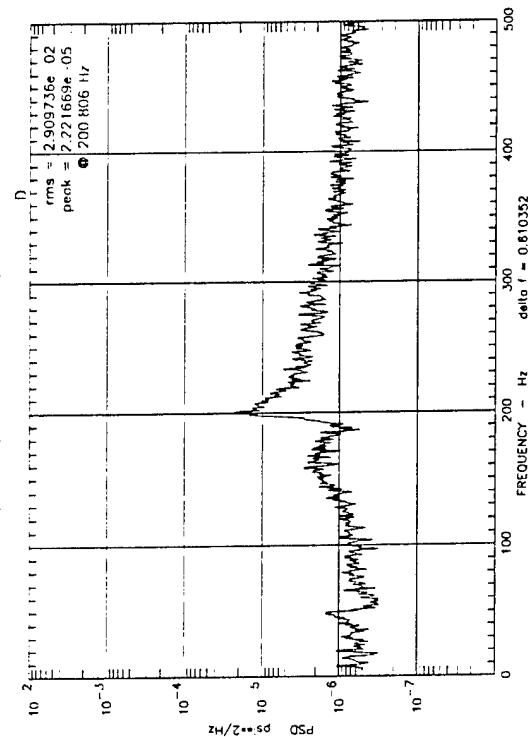
F-15 TPN\_3060: q=56 alpha=20 beta=0 bp@n



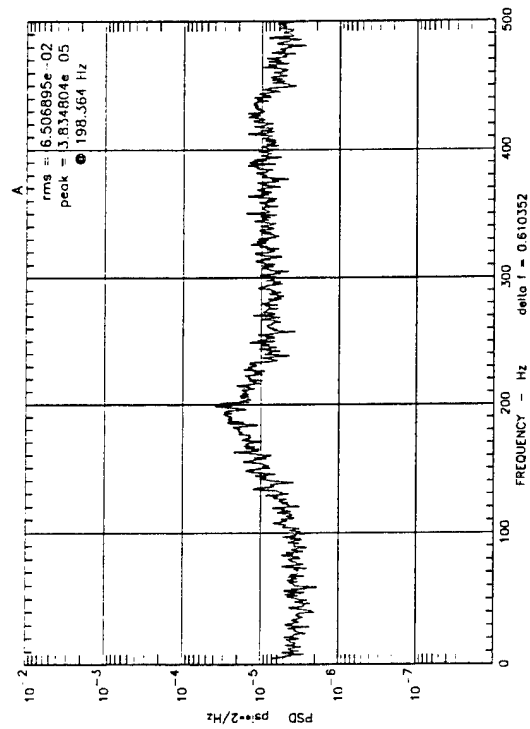
F-15 TPN\_3062: q=56 alpha=24 beta=0 bp@n



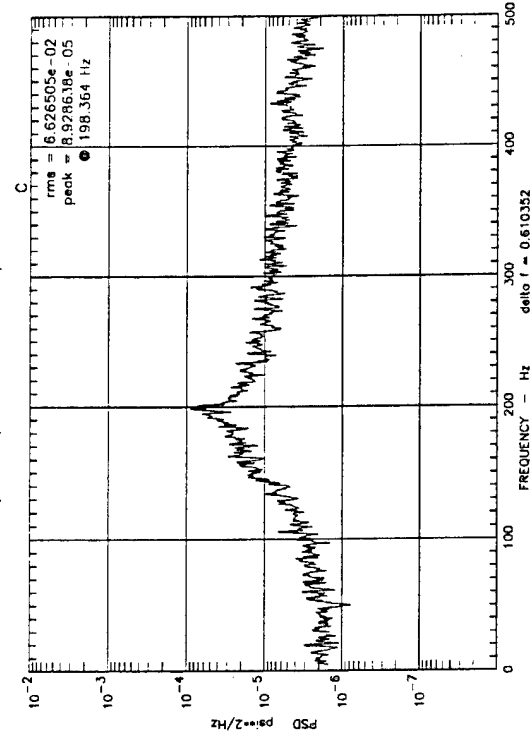
F-15 TPN\_3062: q=56 alpha=24 beta=0 bp@n



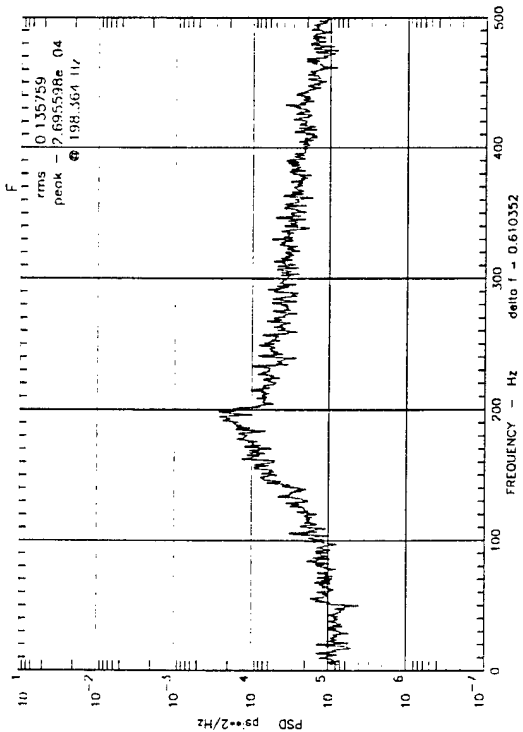
F-15 TPN\_3062: q=56 alpha=24 beta=0 bp@n



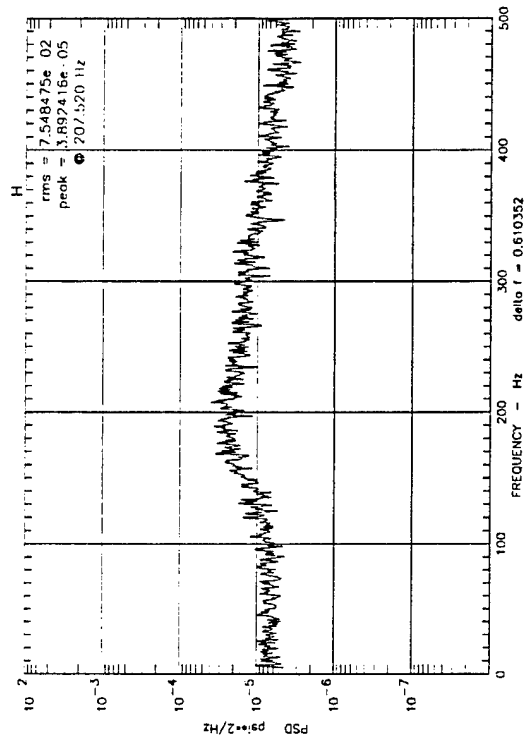
F-15 TPN\_3062: q=56 alpha=24 beta=0 bp@n



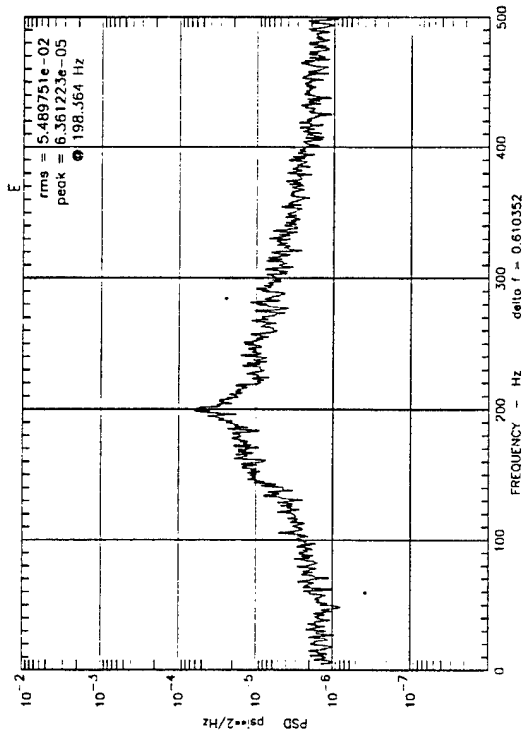
F-15 TPN\_3062: q=56 alpha=24 beta=0 bp@n



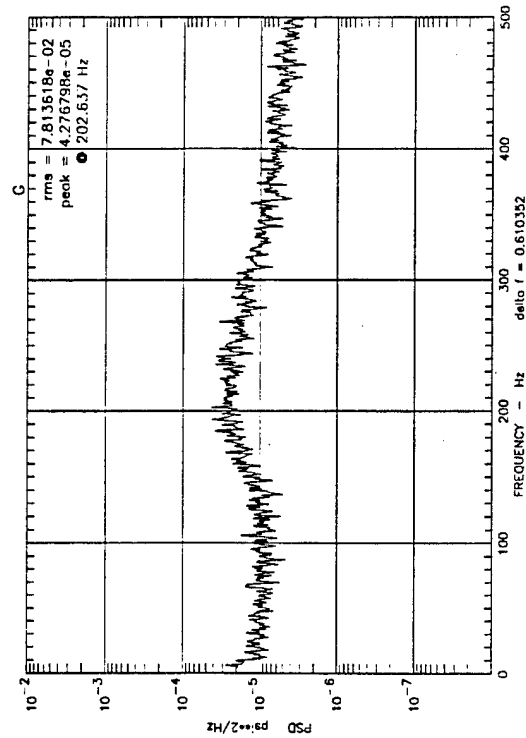
F-15 TPN\_3062: q=56 alpha=24 beta=0 bp@n



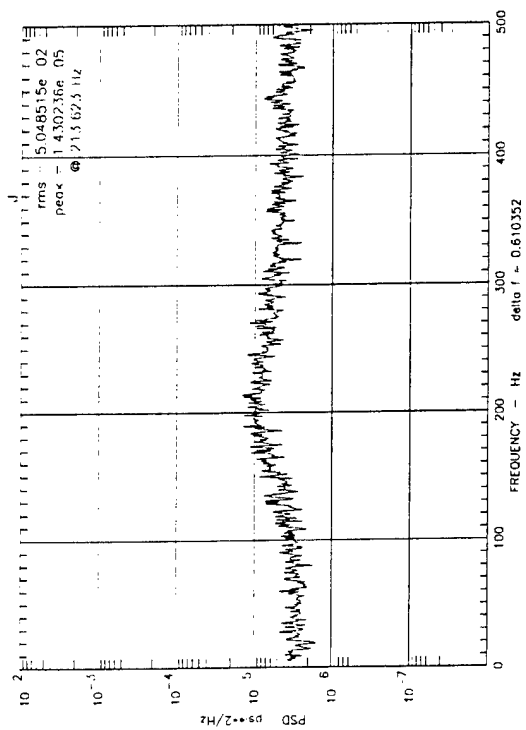
F-15 TPN\_3062: q=56 alpha=24 beta=0 bp@n



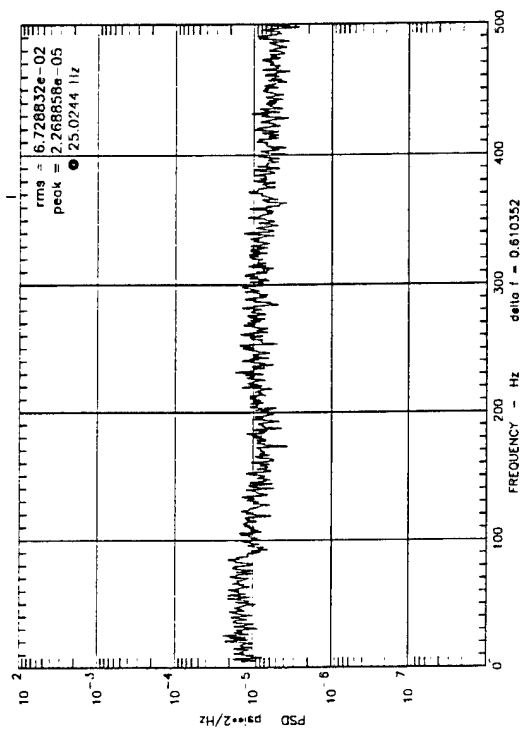
F-15 TPN\_3062: q=56 alpha=24 beta=0 bp@n



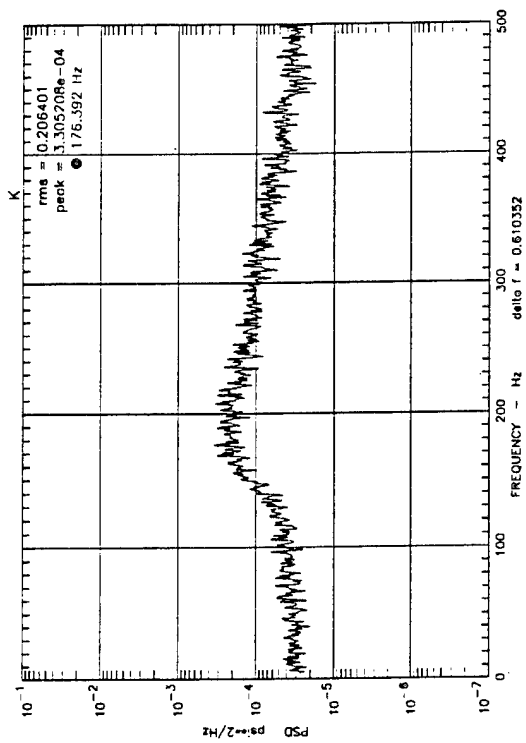
F-15 TPN\_3062: q=56 alpha=24 beta=0 bp@n



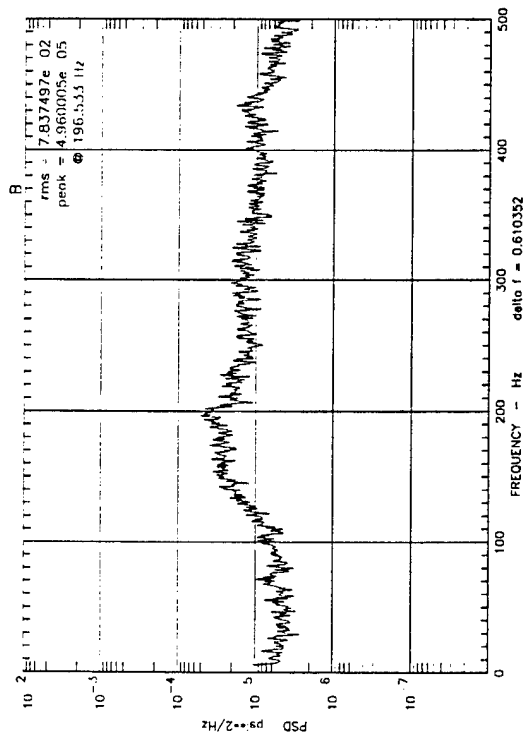
F-15 TPN\_3062: q=56 alpha=24 beta=0 bp@n



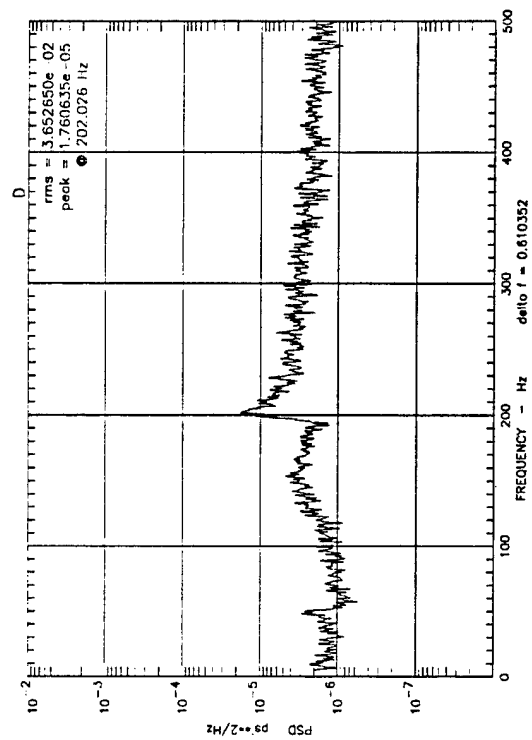
F-15 TPN\_3062: q=56 alpha=24 beta=0 bp@n



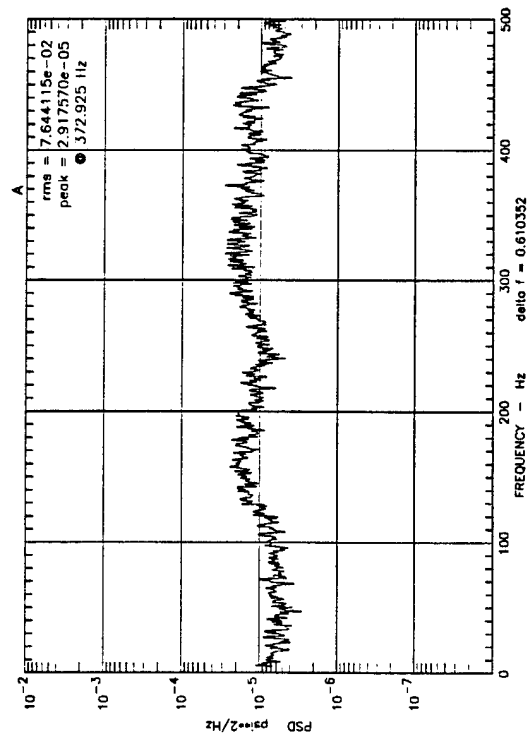
F-15 TPN\_3063: q=56 alpha=26 beta=0 bp@n



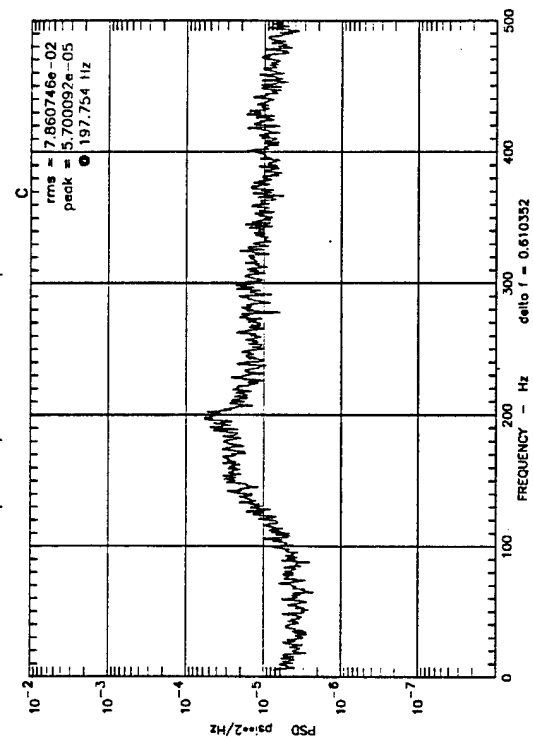
F-15 TPN\_3063: q=56 alpha=26 beta=0 bp@n



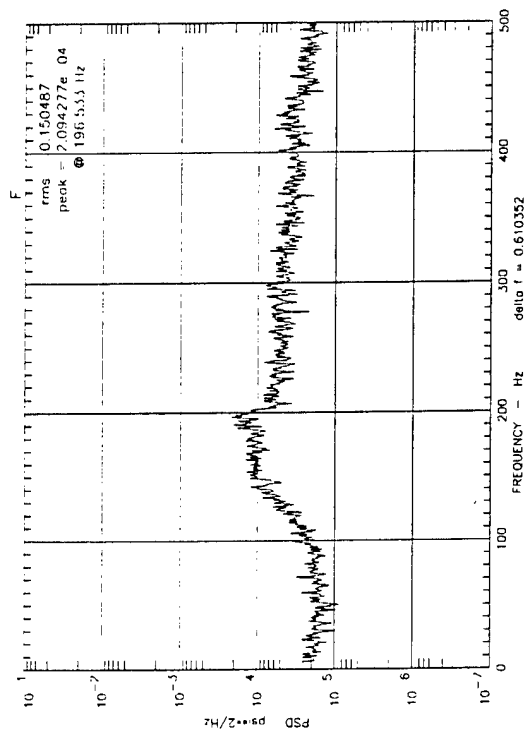
F-15 TPN\_3063: q=56 alpha=26 beta=0 bp@n



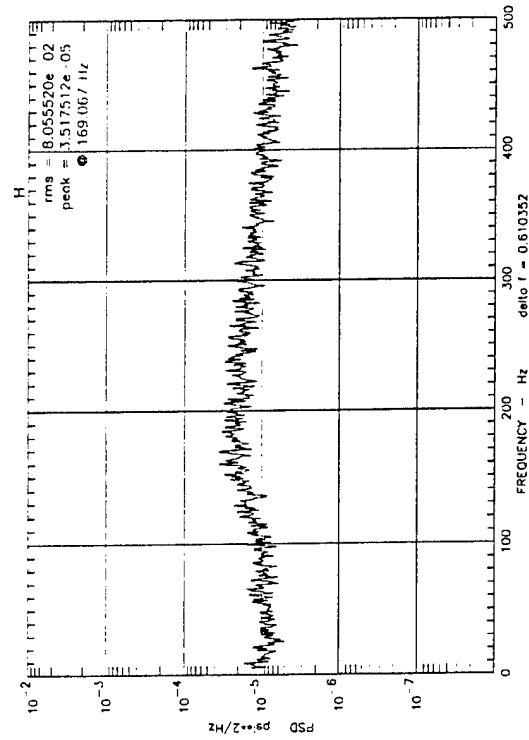
F-15 TPN\_3063: q=56 alpha=26 beta=0 bp@n



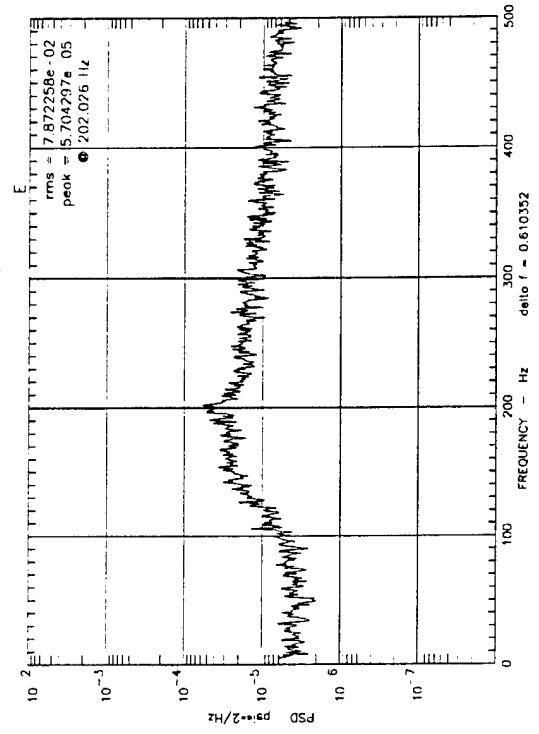
F 15 TPN 3063: q=56 alpha=26 beta=0 bp@n



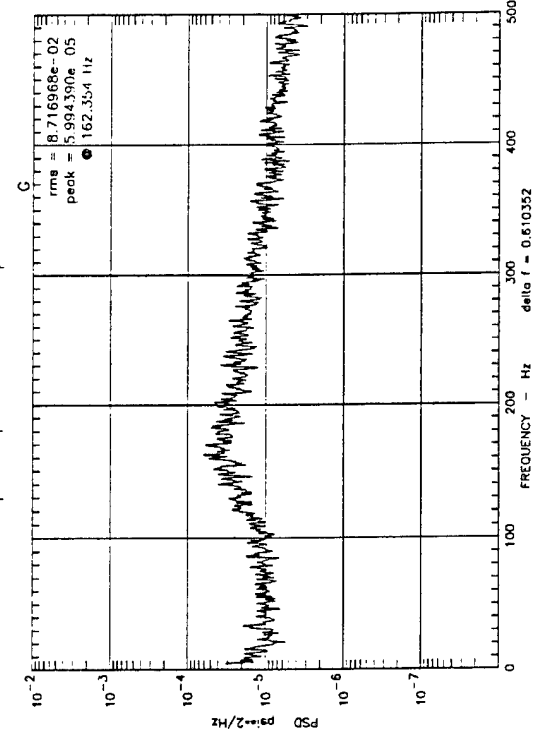
F 15 TPN 3063: q=56 alpha=26 beta=0 bp@n



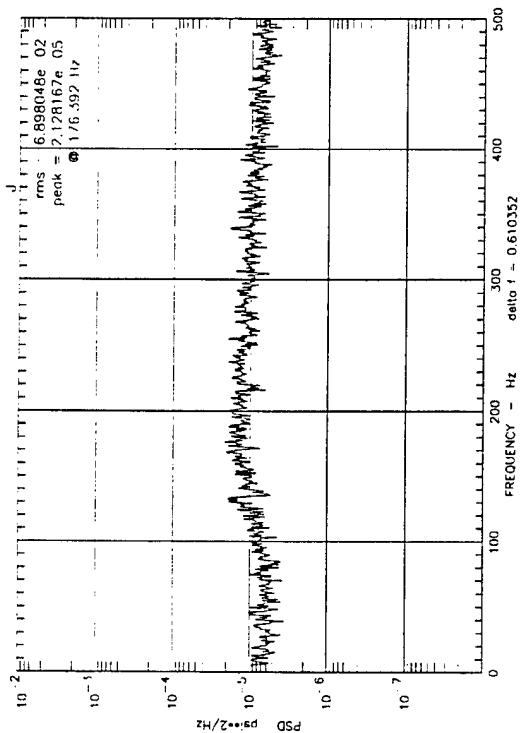
F 15 TPN 3063: q=56 alpha=26 beta=0 bp@n



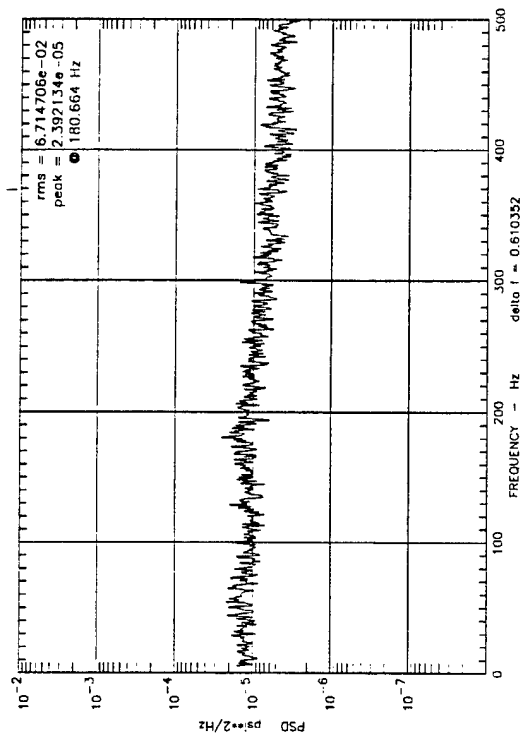
F 15 TPN 3063: q=56 alpha=26 beta=0 bp@n



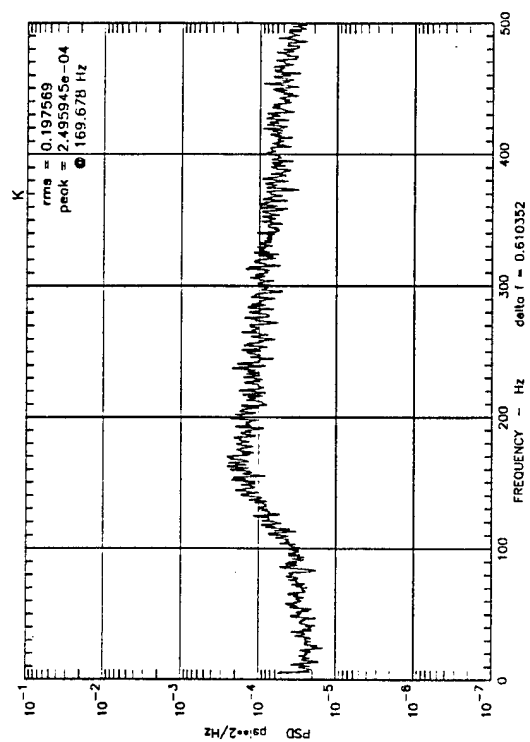
F-15 TPN\_3063: q=56 alpha=26 beta=0 bp@n



F-15 TPN\_3063: q=56 alpha=26 beta=0 bp@n

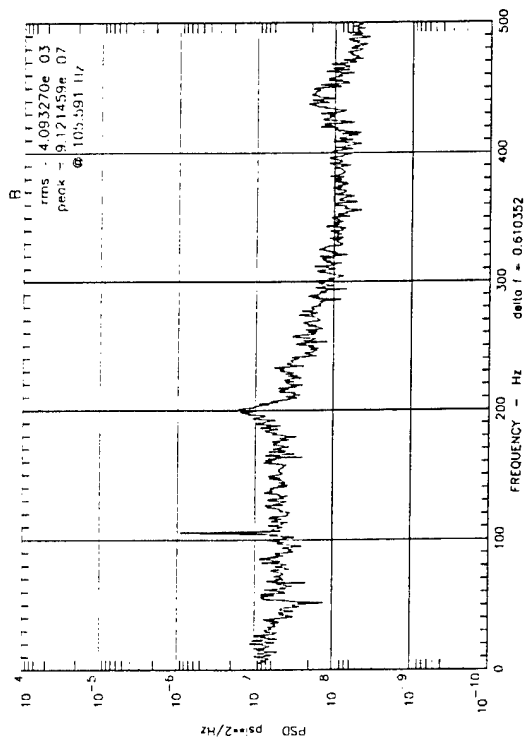


F-15 TPN\_3063: q=56 alpha=26 beta=0 bp@n

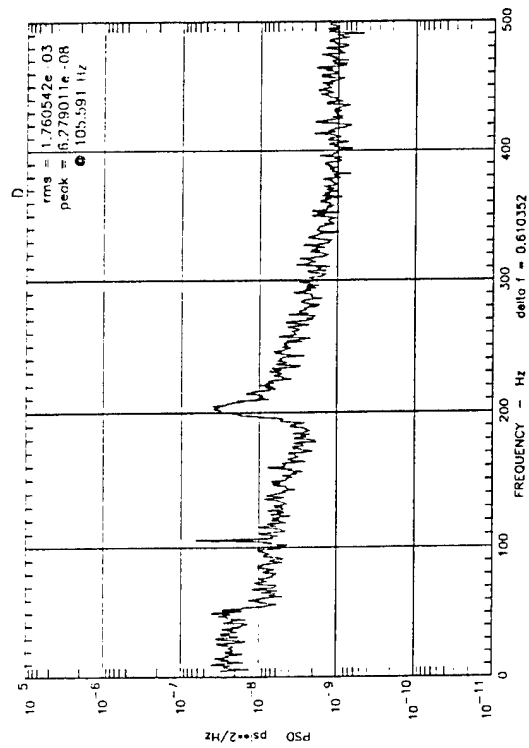




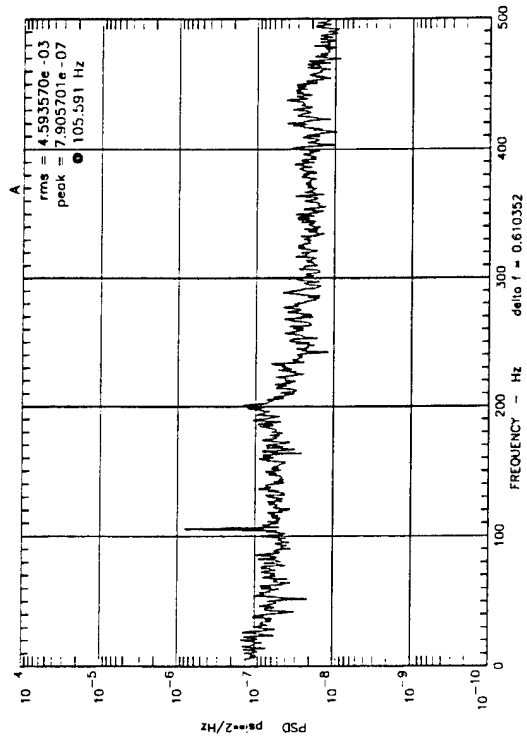
F-15 TPN\_3064: q=56 alpha=16 beta=4 bp@n



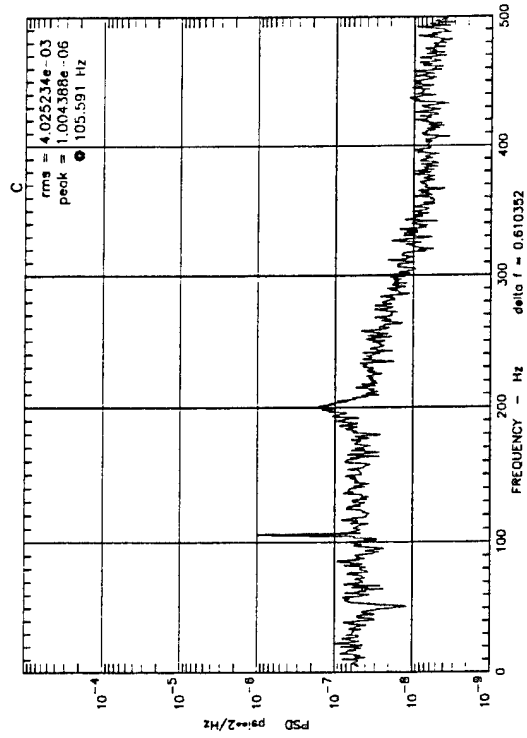
F-15 TPN\_3064: q=56 alpha=16 beta=4 bp@n



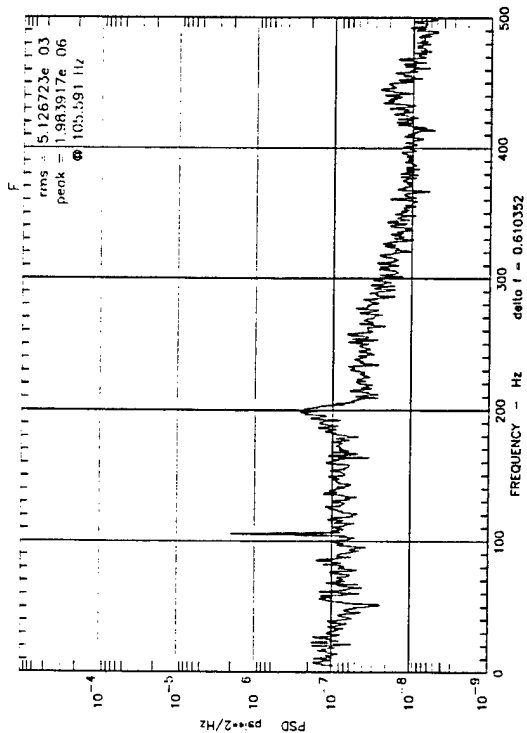
F-15 TPN\_3064: q=56 alpha=16 beta=4 bp@n



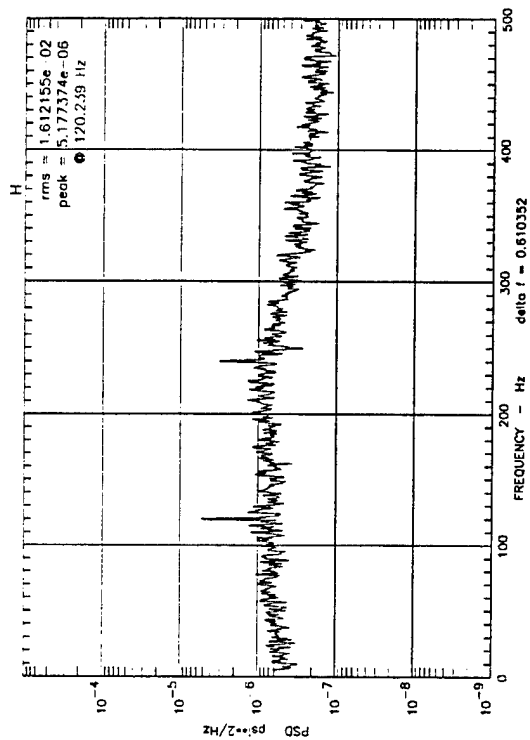
F-15 TPN\_3064: q=56 alpha=16 beta=4 bp@n



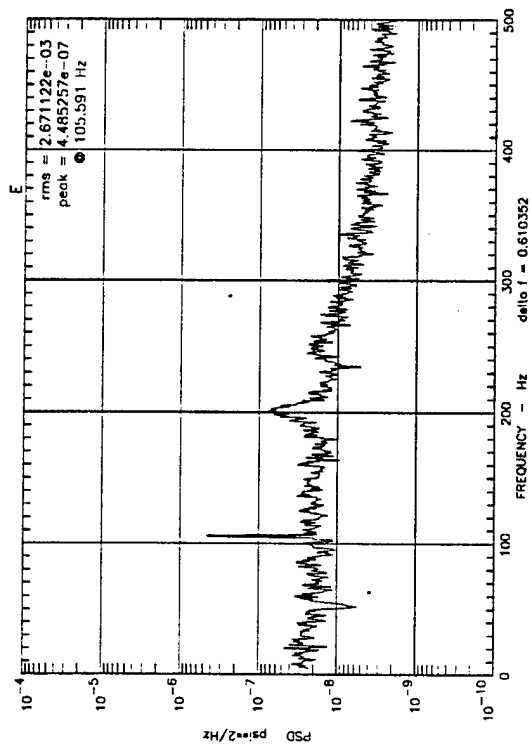
F-15 TPN\_3064: q=56 alpha=16 beta=4 bp@n



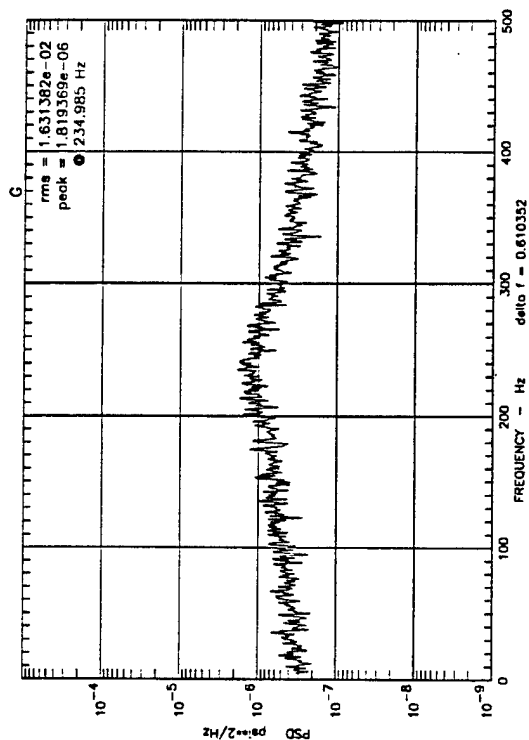
F-15 TPN\_3064: q=56 alpha=16 beta=4 bp@n



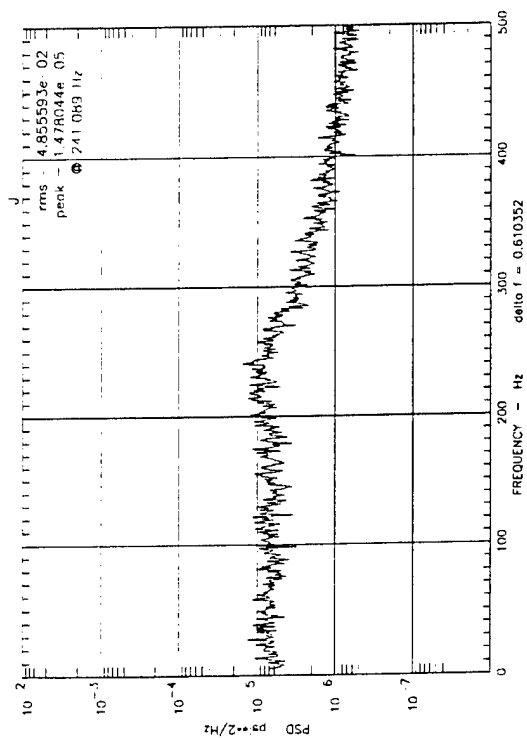
F-15 TPN\_3064: q=56 alpha=16 beta=4 bp@n



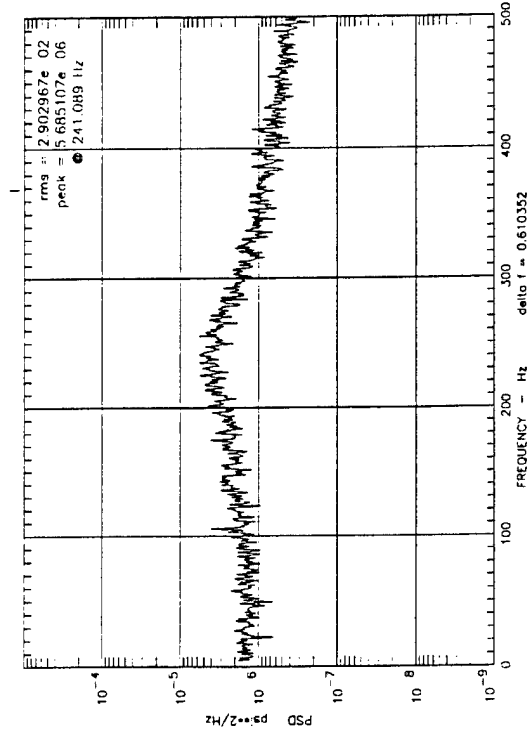
F-15 TPN\_3064: q=56 alpha=16 beta=4 bp@n



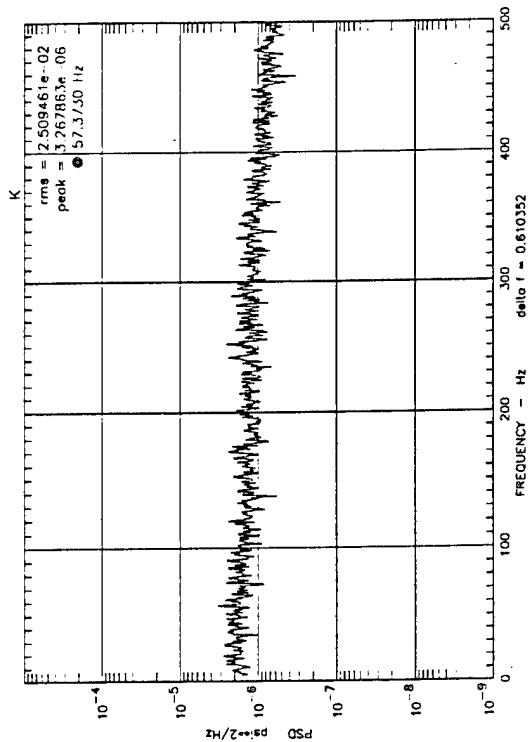
F-15 TPN\_3064: q=56 alpha=16 beta=4 bp@n



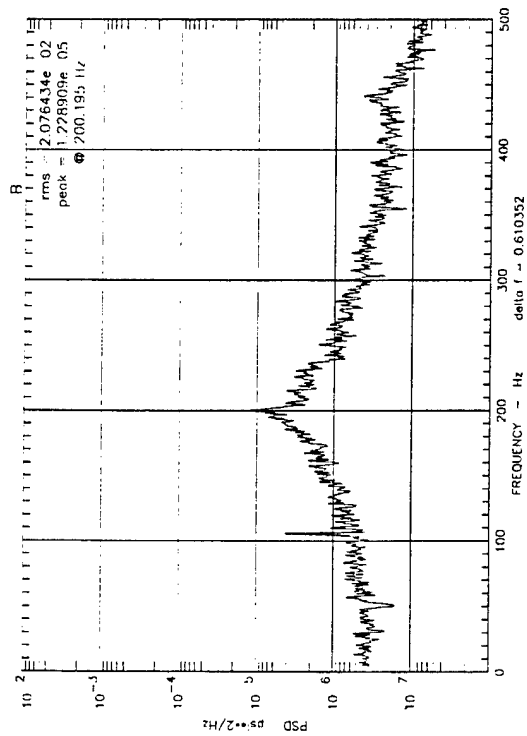
F-15 TPN\_3064: q=56 alpha=16 beta=4 bp@n



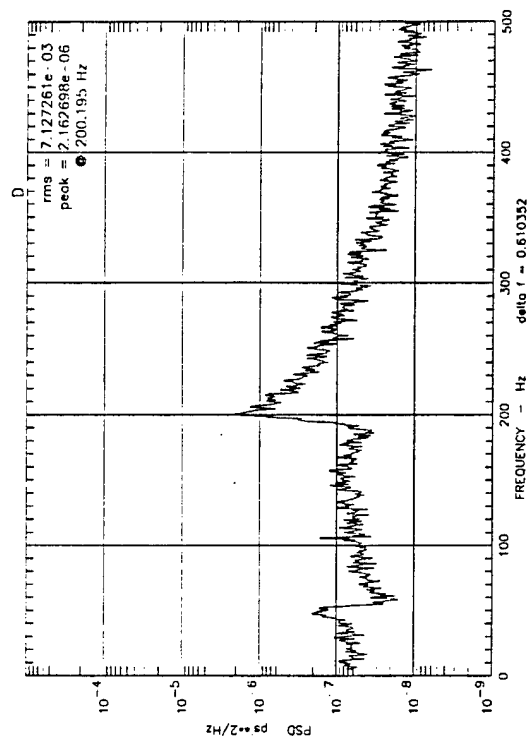
F-15 TPN\_3064: q=56 alpha=16 beta=4 bp@n



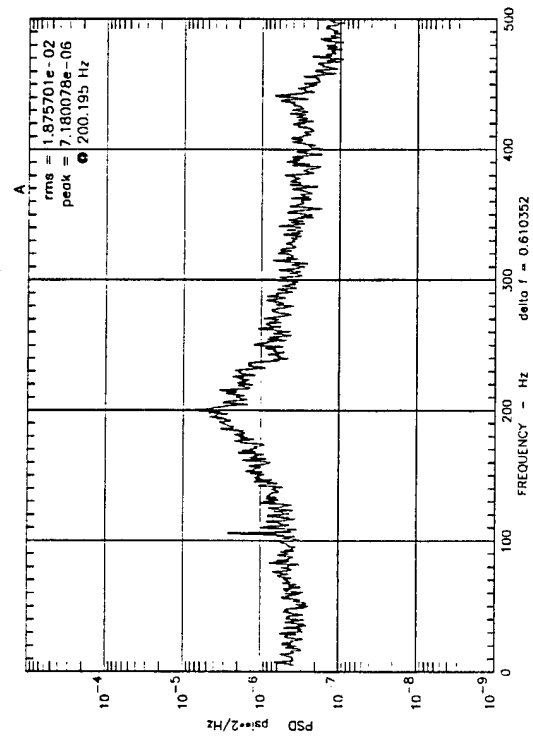
F 15 TPN 3066: q=56 alpha=20 beta=4 bp@n



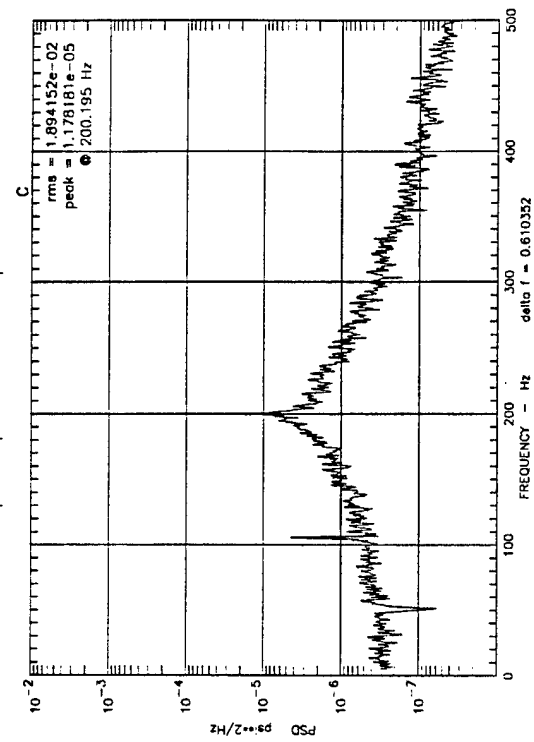
F -15 TPN 3066: q=56 alpha=20 beta=4 bp@n



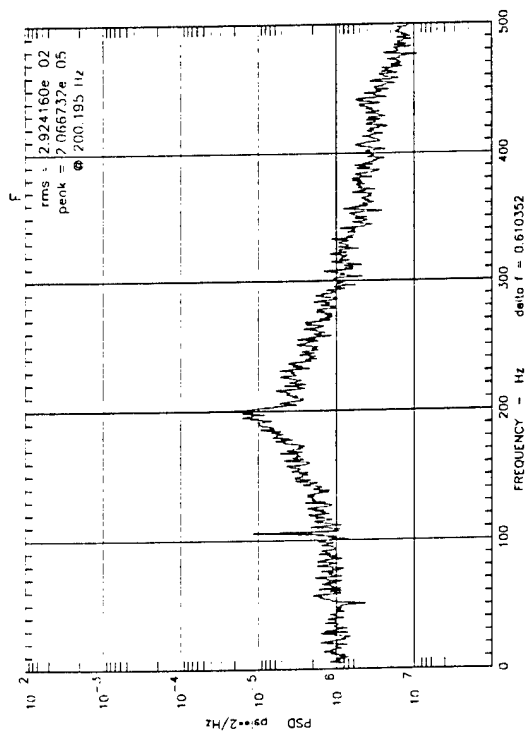
F -15 TPN 3066: q=56 alpha=20 beta=4 bp@n



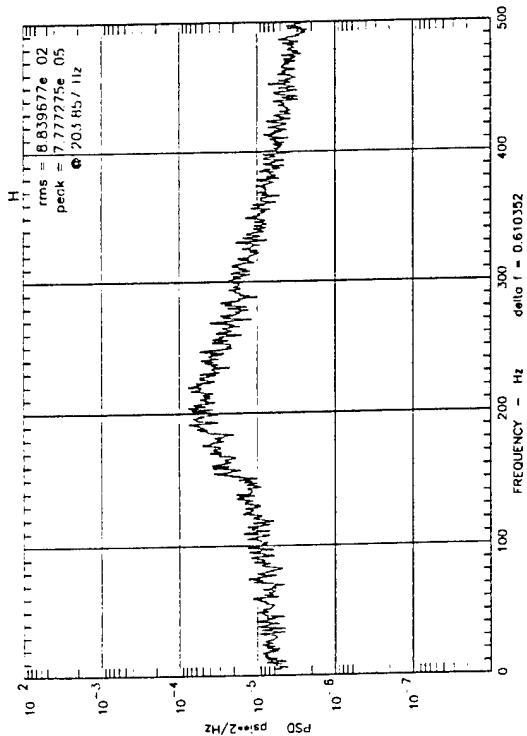
F -15 TPN 3066: q=56 alpha=20 beta=4 bp@n



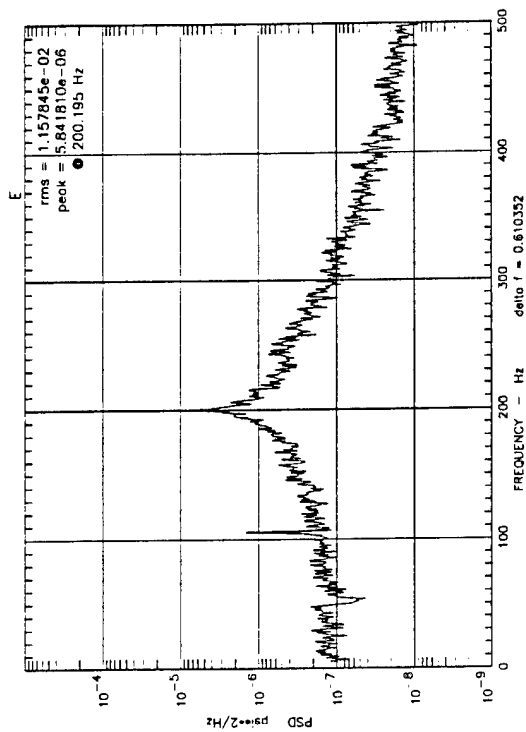
F-15 TPN 3066: q=56 alpha=20 beta=4 bp@n



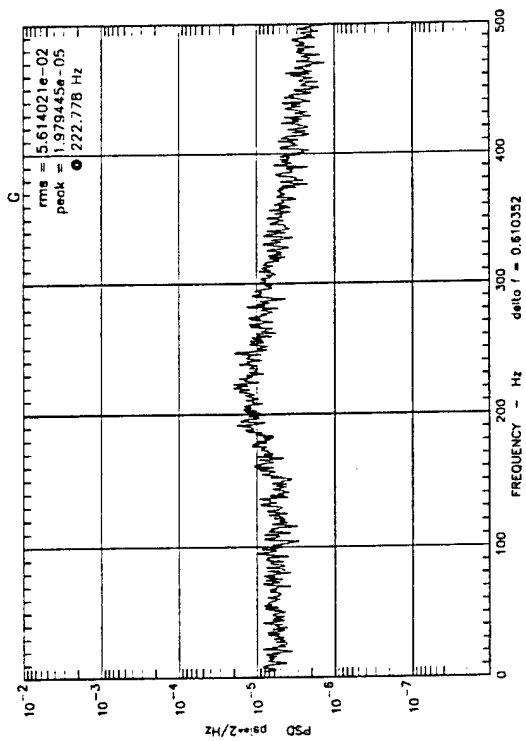
F-15 TPN 3066: q=56 alpha=20 beta=4 bp@n

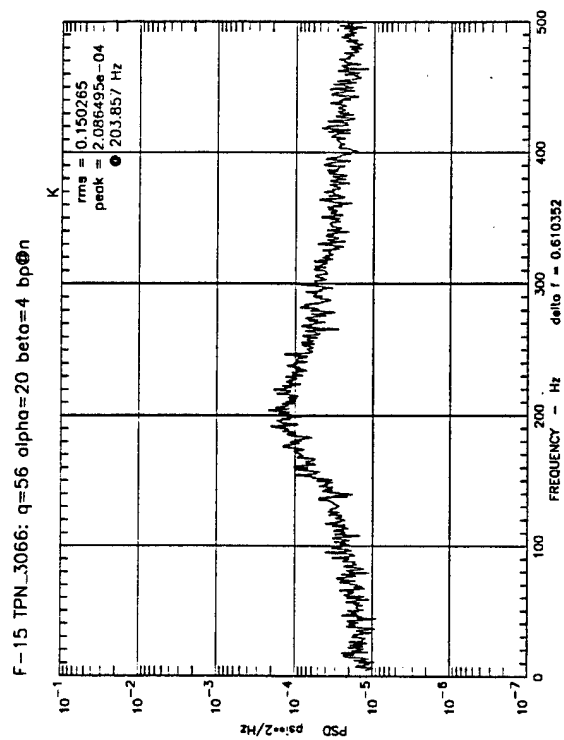
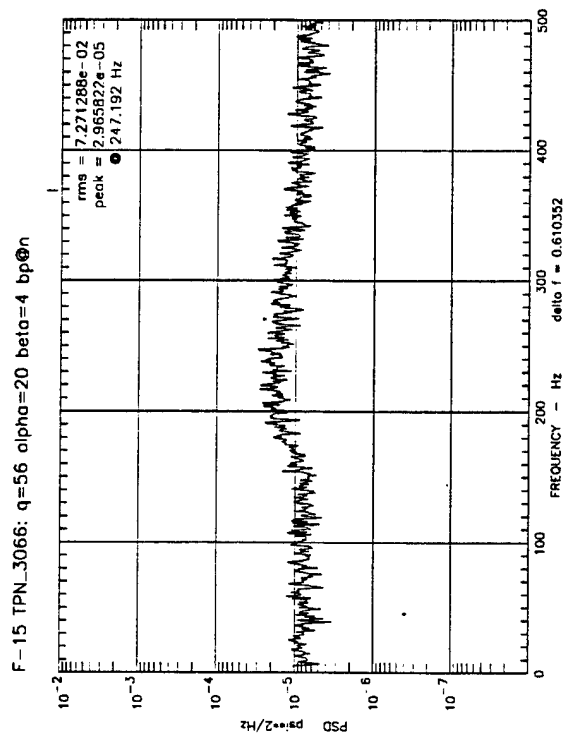
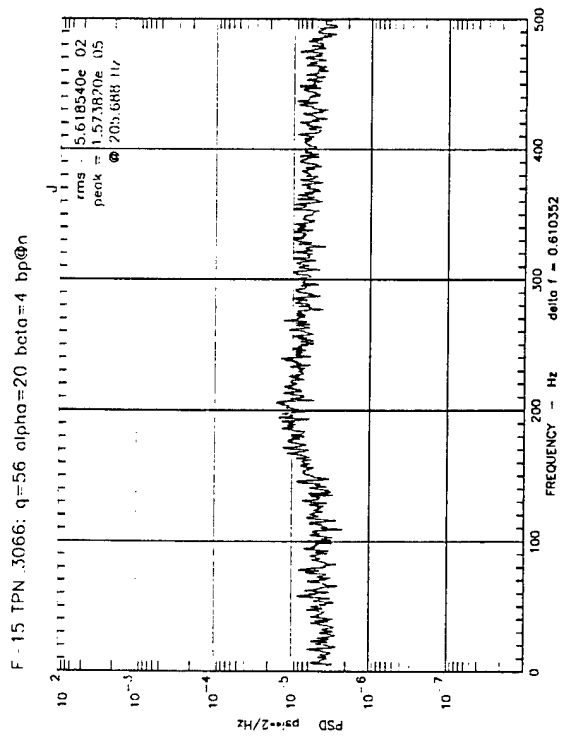


F-15 TPN 3066: q=56 alpha=20 beta=4 bp@n

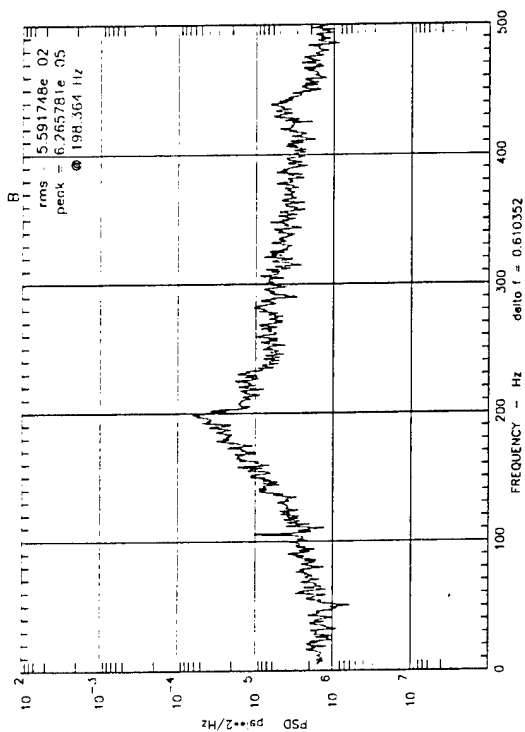


F-15 TPN 3066: q=56 alpha=20 beta=4 bp@n

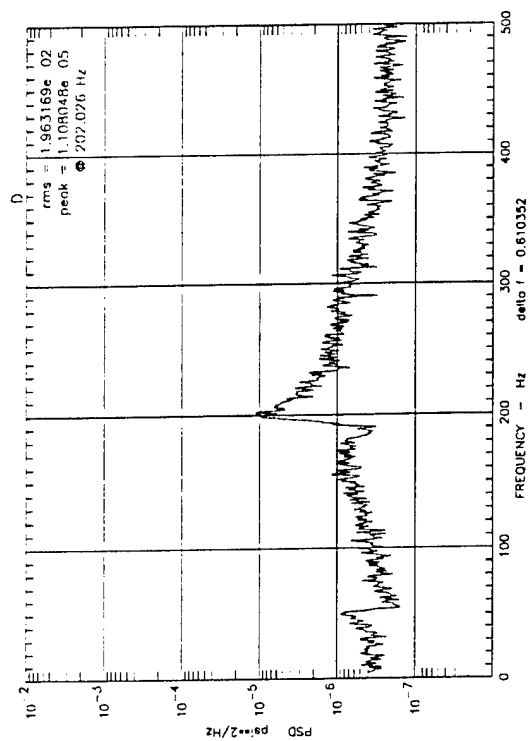




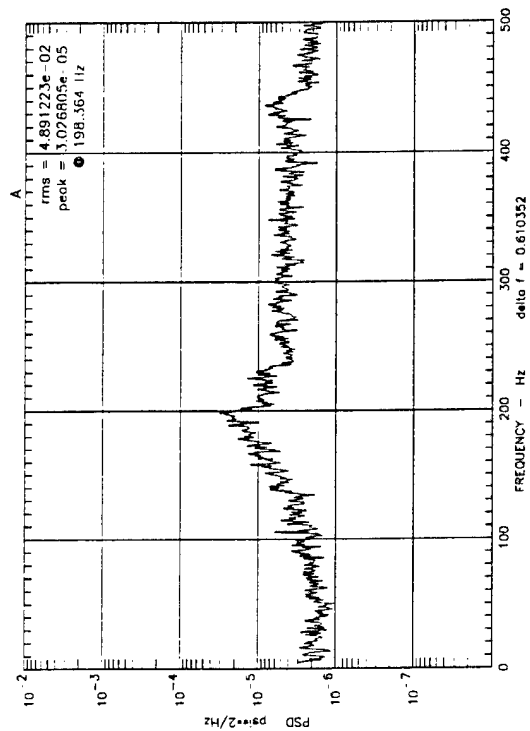
F 15 TPN 3068: q=56 alpha=24 beta=4 bp@n



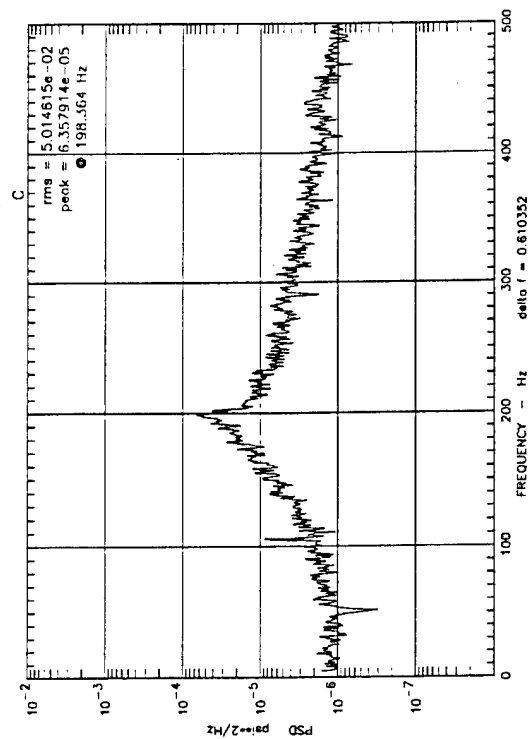
F -15 TPN 3068: q=56 alpha=24 beta=4 bp@n



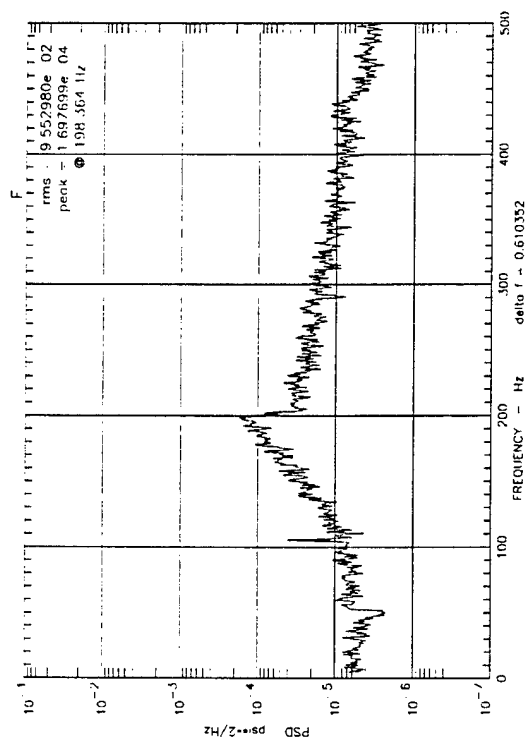
F -15 TPN 3068: q=56 alpha=24 beta=4 bp@n



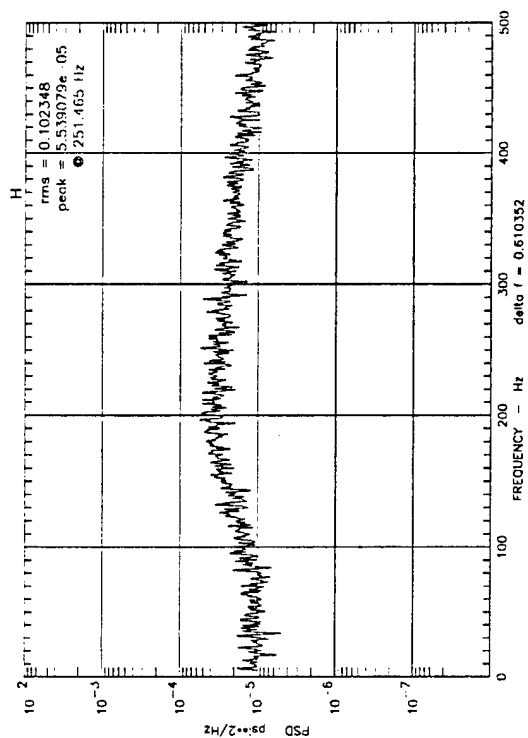
F -15 TPN 3068: q=56 alpha=24 beta=4 bp@n



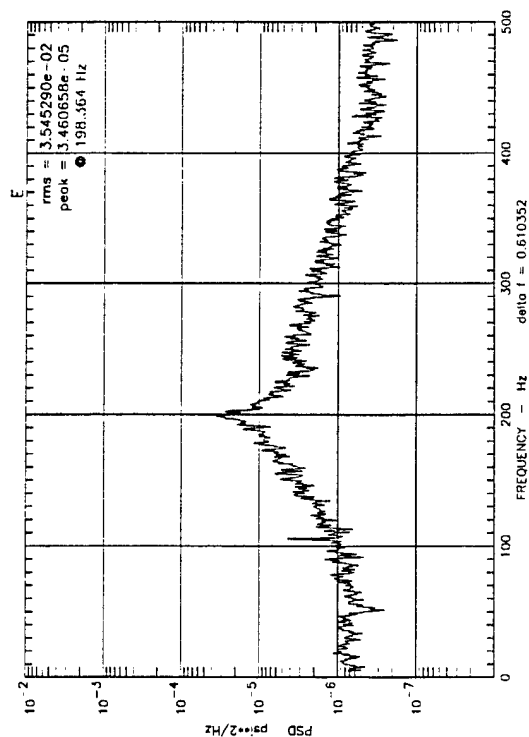
F-15 TPN\_3068: q=56 alpha=24 beta=4 bp@n



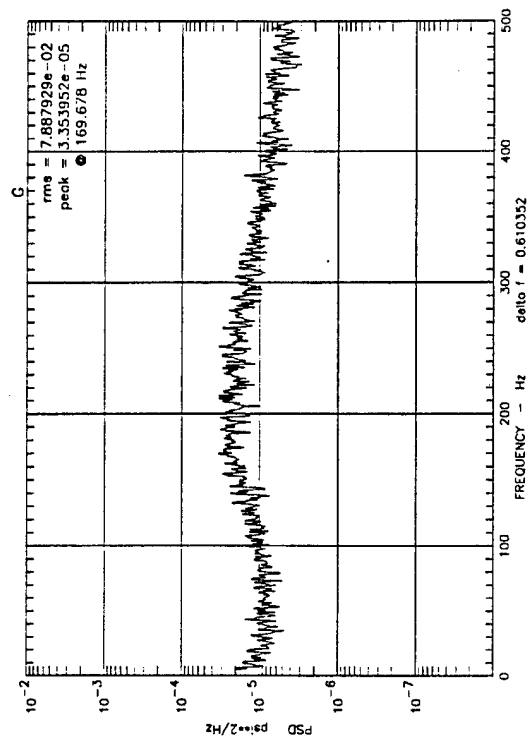
F-15 TPN\_3068: q=56 alpha=24 beta=4 bp@n



F-15 TPN\_3068: q=56 alpha=24 beta=4 bp@n

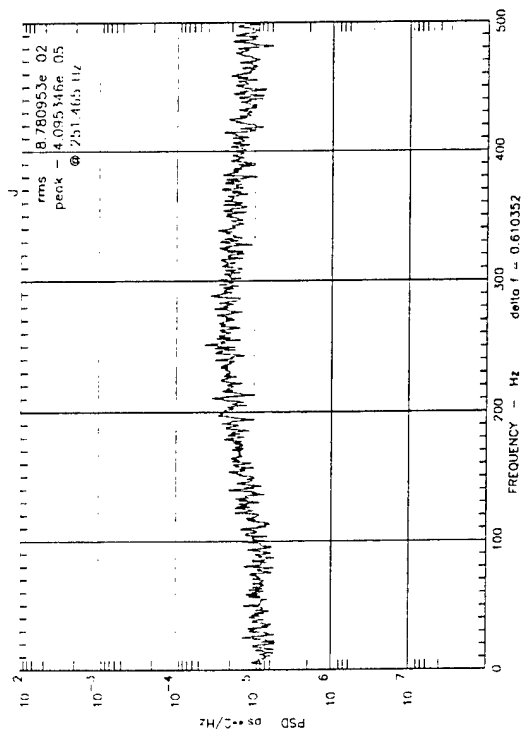


F-15 TPN\_3068: q=56 alpha=24 beta=4 bp@n

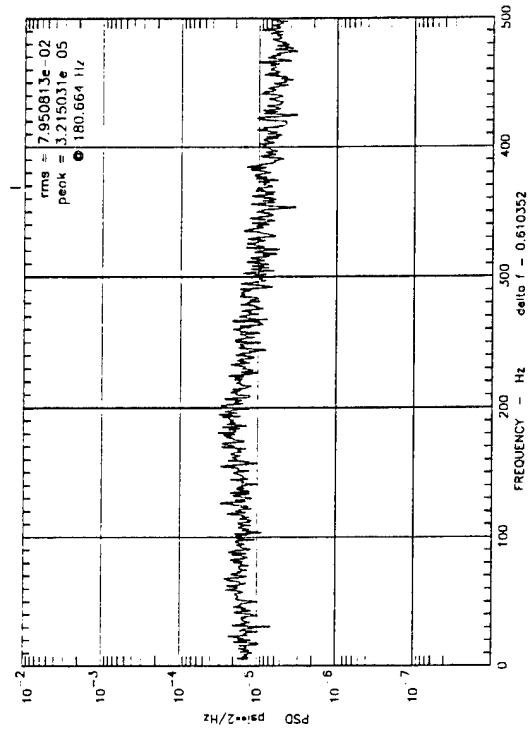




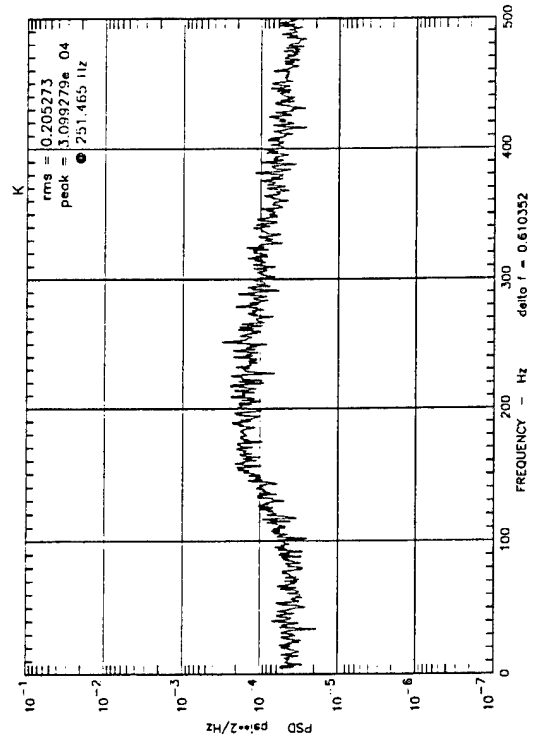
F-15 TPN\_3068: q=56 alpha=24 beta=4 bp@n



F-15 TPN\_3068: q=56 alpha=24 beta=4 bp@n



F-15 TPN\_3068: q=56 alpha=24 beta=4 bp@n

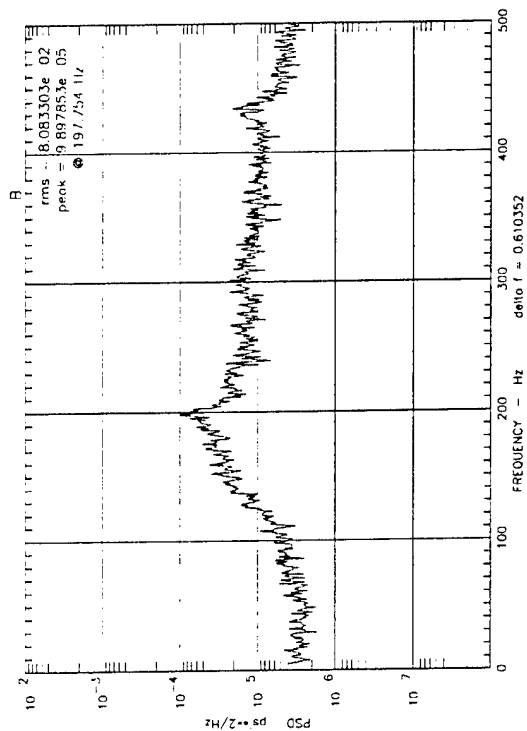


**PRESSURE PSD's**

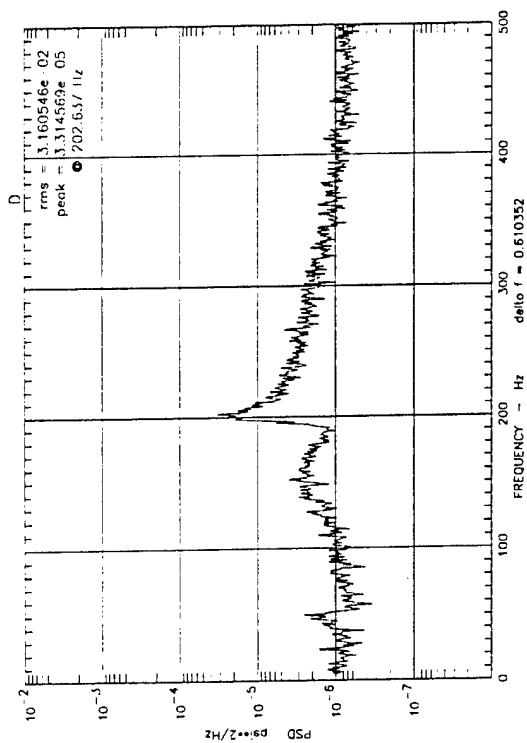
**Q=56 PSF**

**2.1.2.5 PSD GRAPHS( 5- 500 Hz), NBP = 87 PSI, GBP = 65 PSI, Beta = 0, +4, -4  
Deg, Alpha = 8...32 Deg**

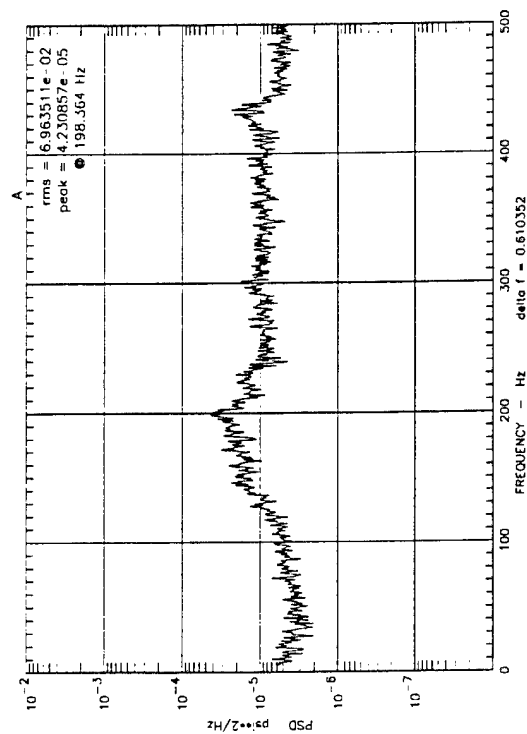
F-15 TPN\_3069: q=56 alpha=26 beta=4 bp@n



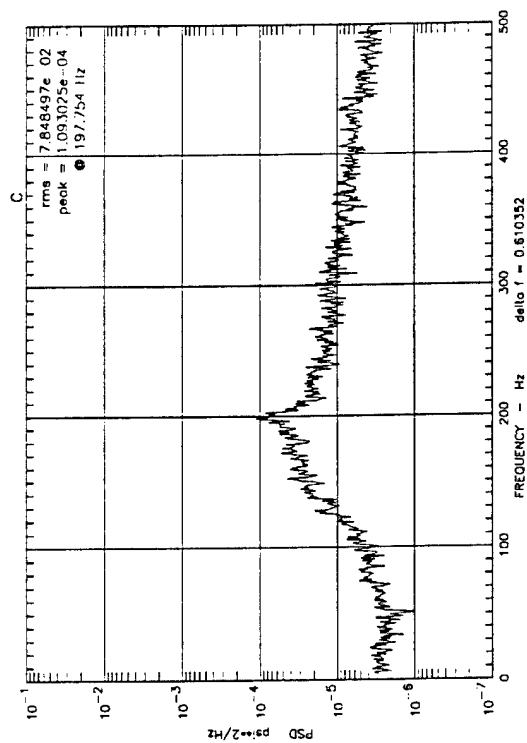
F-15 TPN\_3069: q=56 alpha=26 beta=4 bp@n



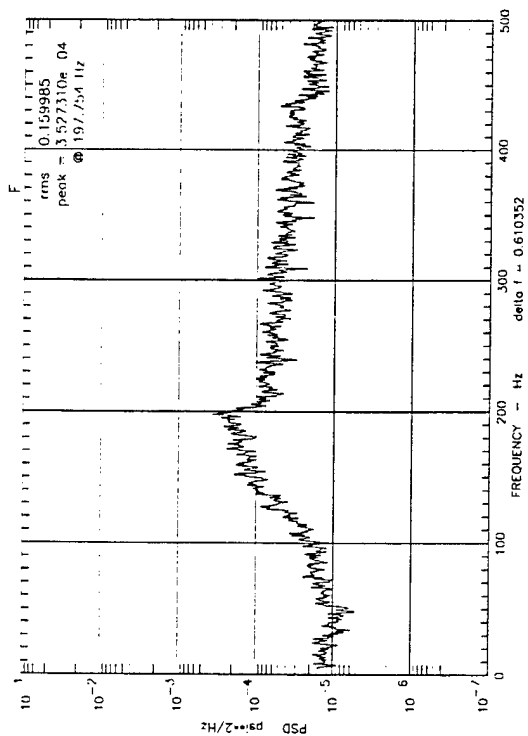
F-15 TPN\_3069: q=56 alpha=26 beta=4 bp@n



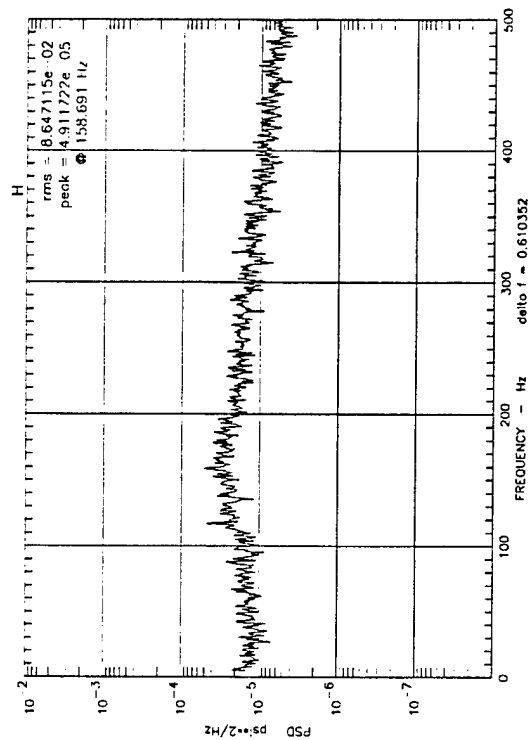
F-15 TPN\_3069: q=56 alpha=26 beta=4 bp@n



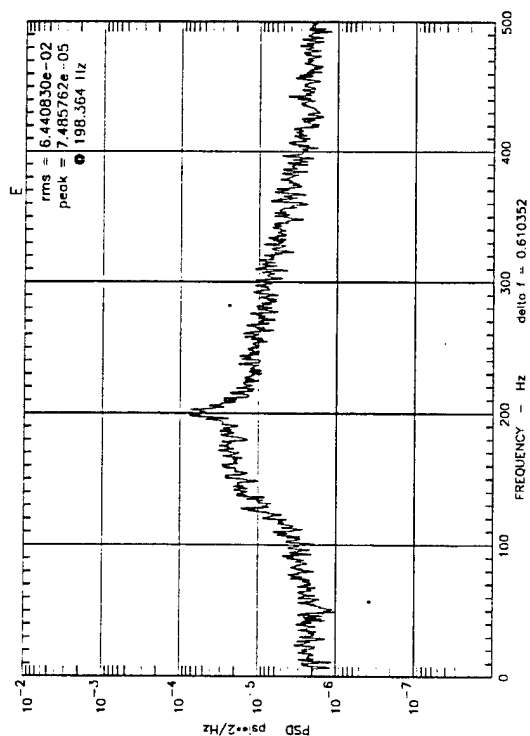
F-15 TPN\_3069: q=56 alpha=26 beta=4 bp@n



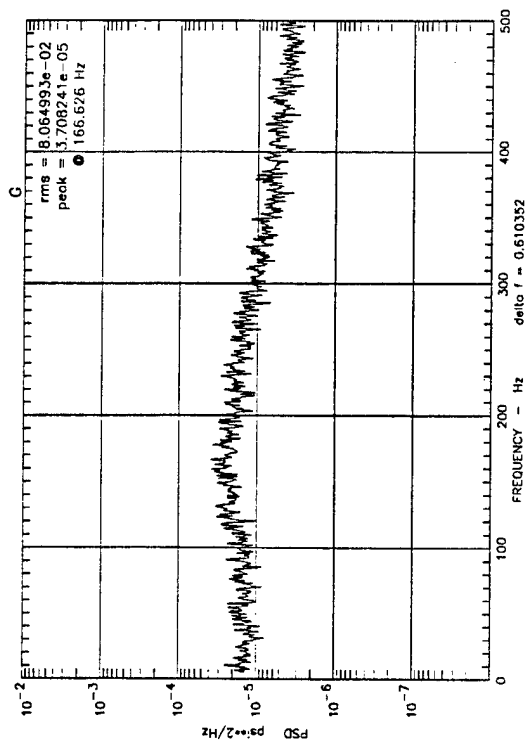
F-15 TPN\_3069: q=56 alpha=26 beta=4 bp@n



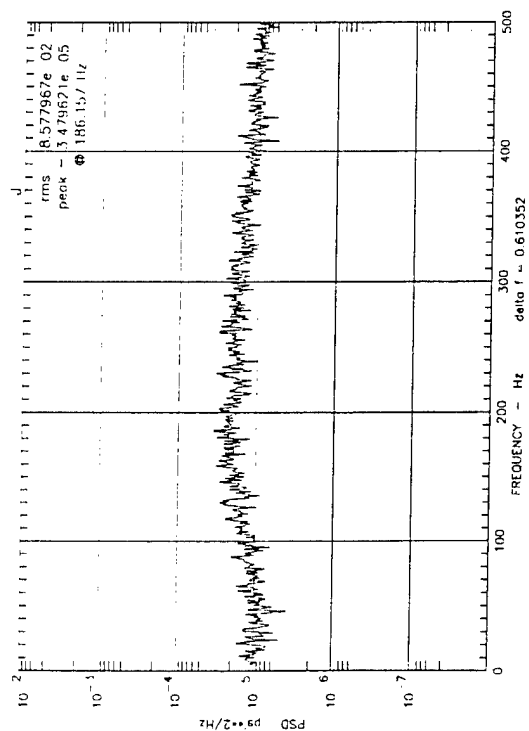
F-15 TPN\_3069: q=56 alpha=26 beta=4 bp@n



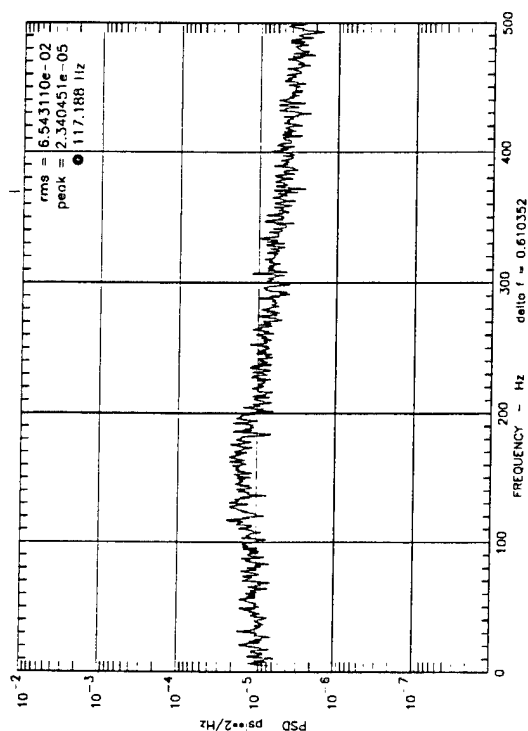
F-15 TPN\_3069: q=56 alpha=26 beta=4 bp@n



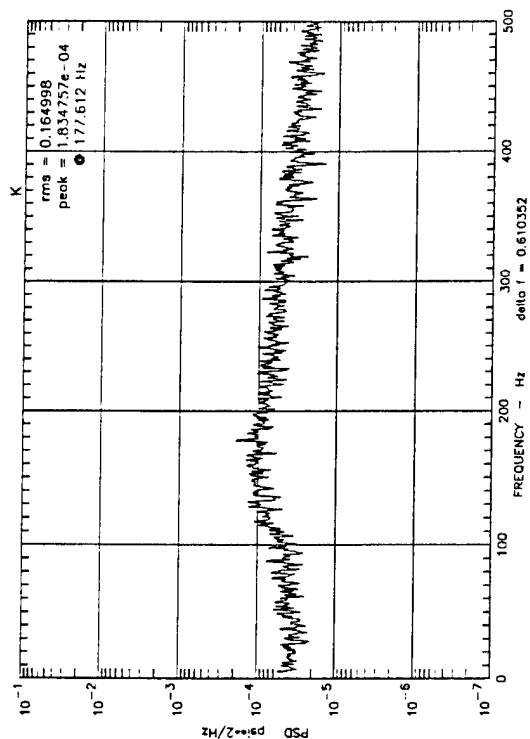
F-15 TPN\_3069: q=56 alpha=26 beta=4 bp@n



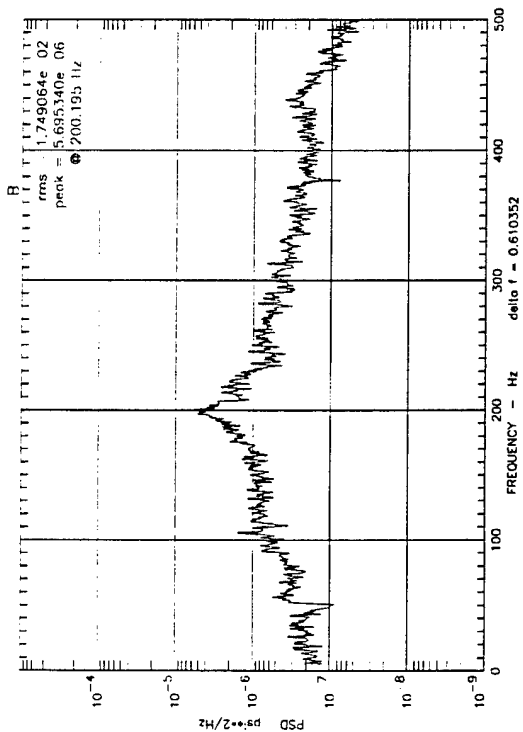
F-15 TPN\_3069: q=56 alpha=26 beta=4 bp@n



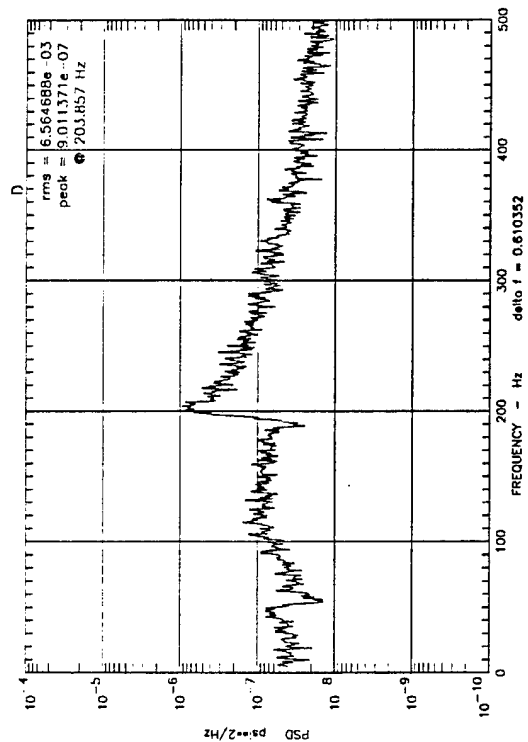
F-15 TPN\_3069: q=56 alpha=26 beta=4 bp@n



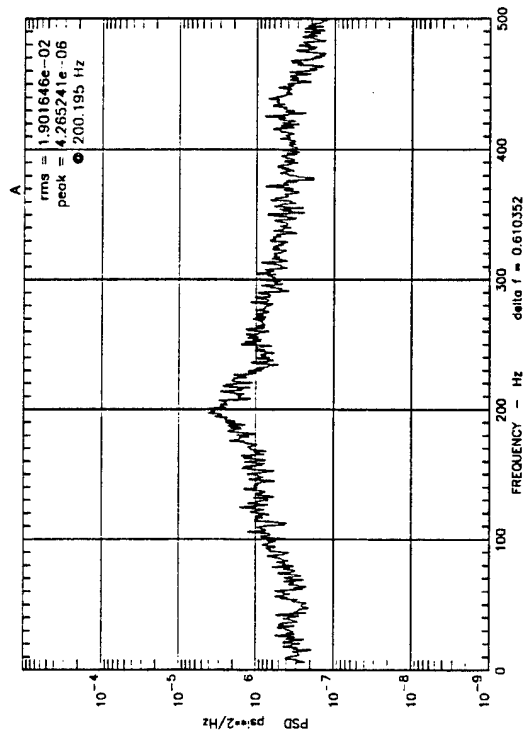
F-15 TPN\_3073: q=56 alpha=16 beta=-4 bp@n&g



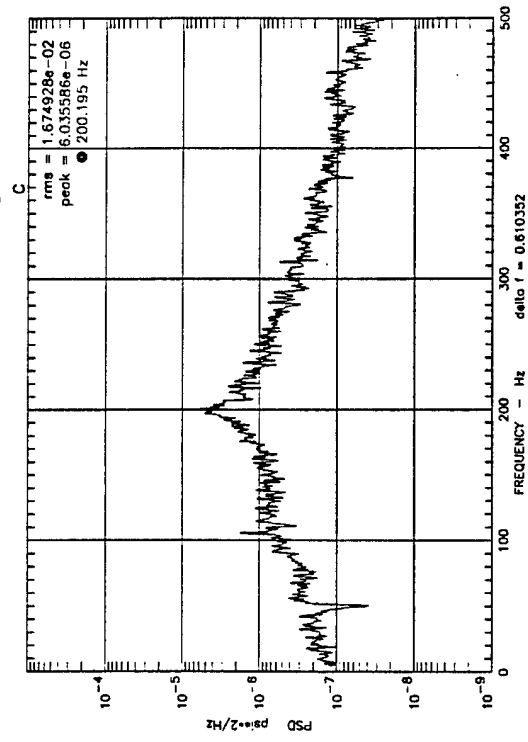
F-15 TPN\_3073: q=56 alpha=16 beta=-4 bp@n&g



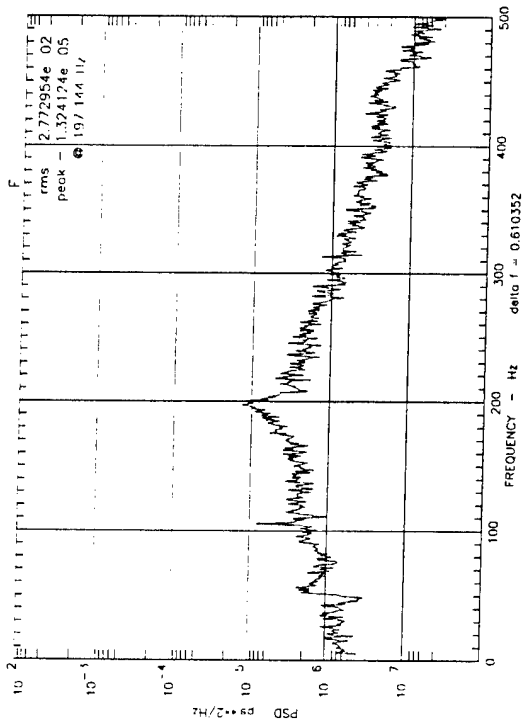
F-15 TPN\_3073: q=56 alpha=16 beta=-4 bp@n&g



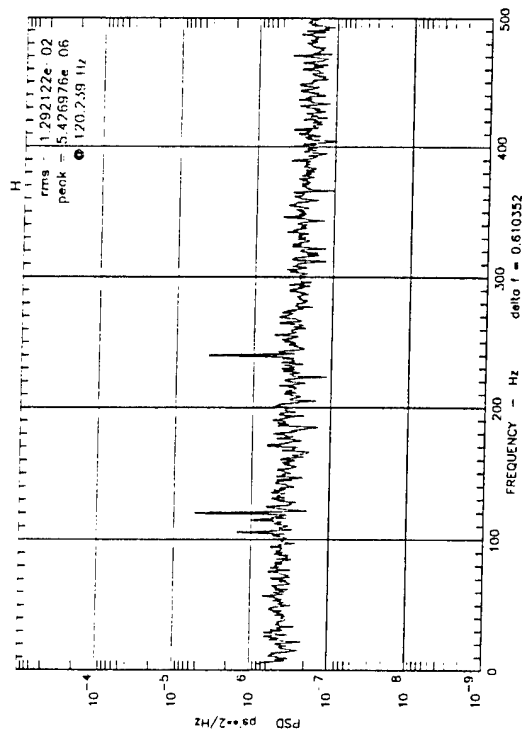
F-15 TPN\_3073: q=56 alpha=16 beta=-4 bp@n&g



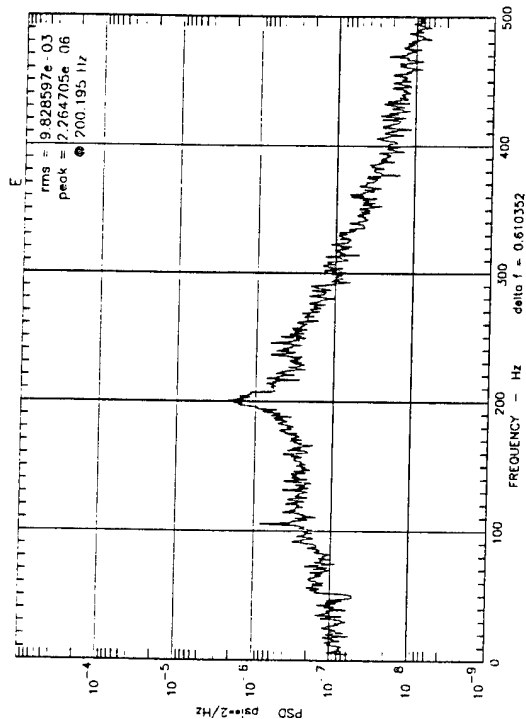
F 15 TPN 3073: q=56 alpha=16 beta= 4 bp@n&g



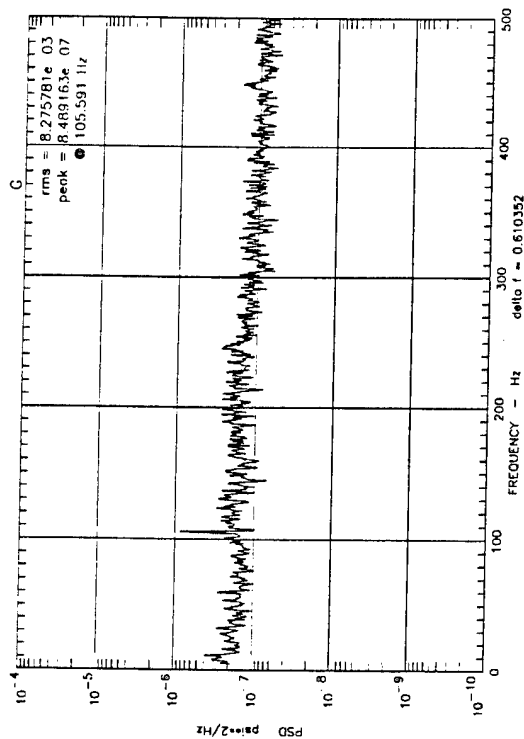
F 15 TPN 3073: q=56 alpha=16 beta= 4 bp@n&g



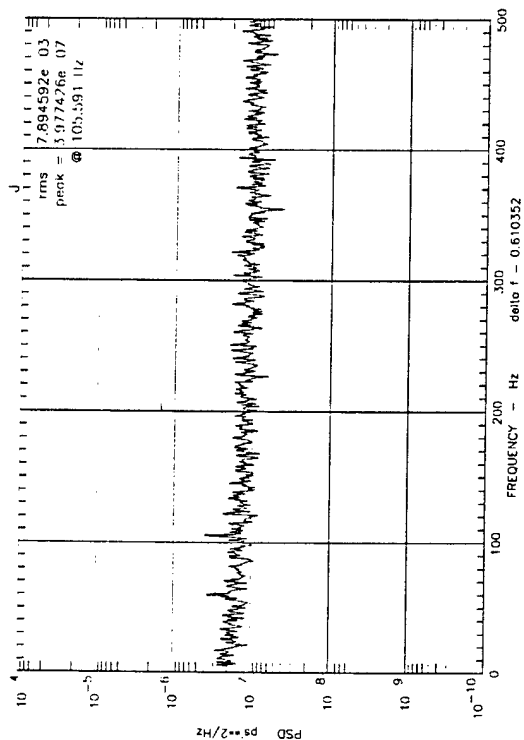
F 15 TPN 3073: q=56 alpha=16 beta= 4 bp@n&g



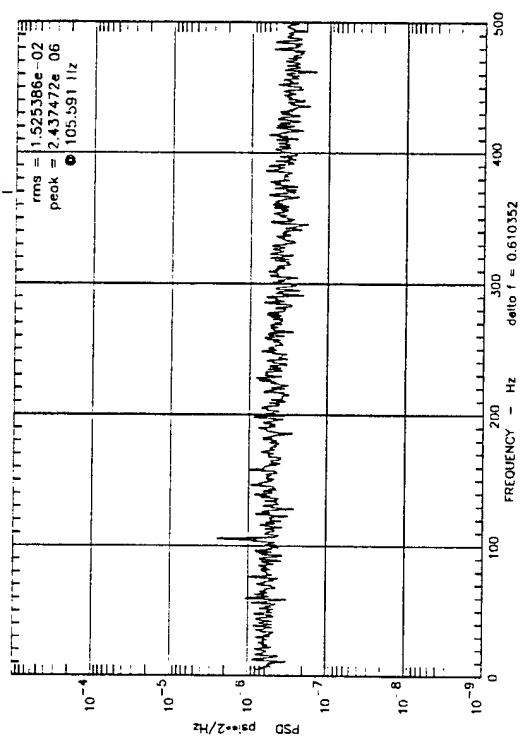
F 15 TPN 3073: q=56 alpha=16 beta= -4 bp@n&g



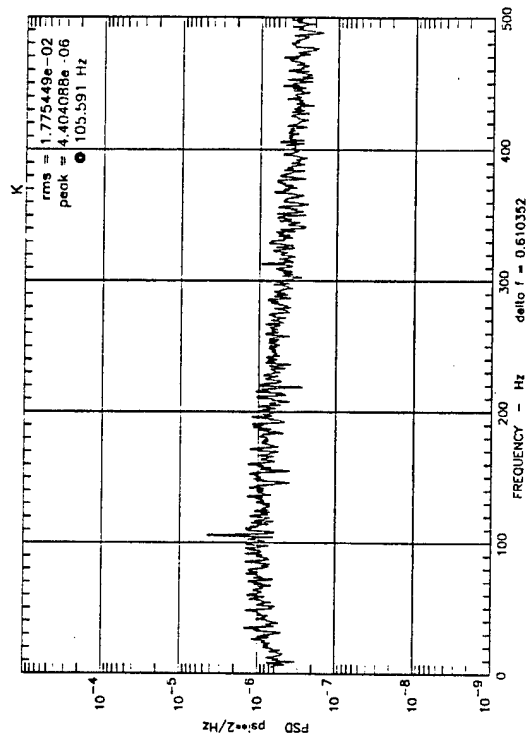
F-15 TPN .3073: q=56 alpha=16 beta=-4 bp@n&q



F-15 TPN .3073: q=56 alpha=16 beta=-4 bp@n&q

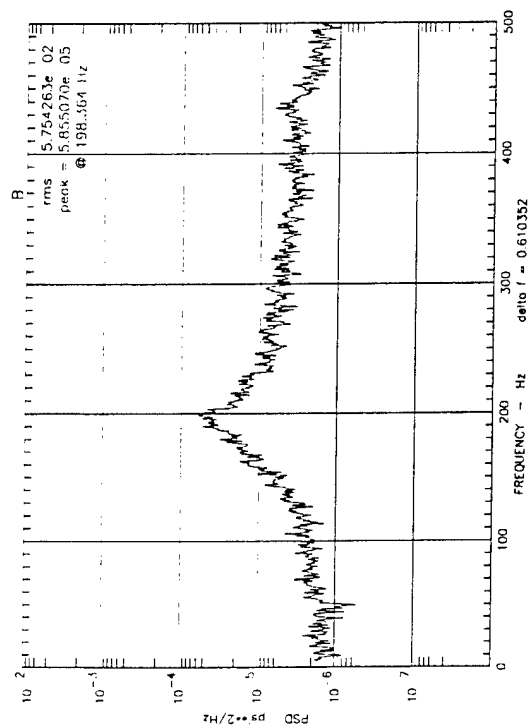


F-15 TPN .3073: q=56 alpha=16 beta=-4 bp@n&q

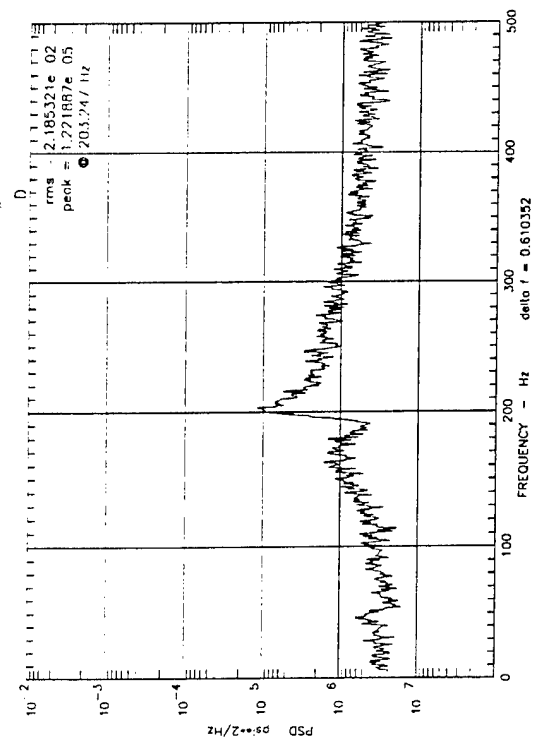




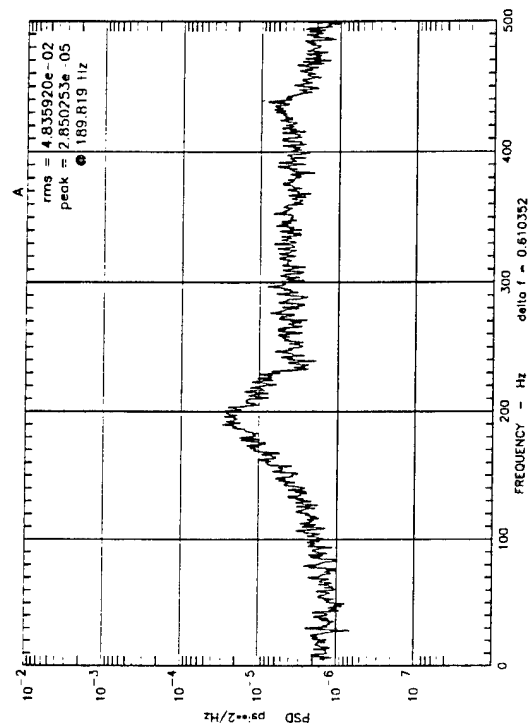
F-15 TPN\_3075: q=56 alpha=20 beta=-4 bp@n&g



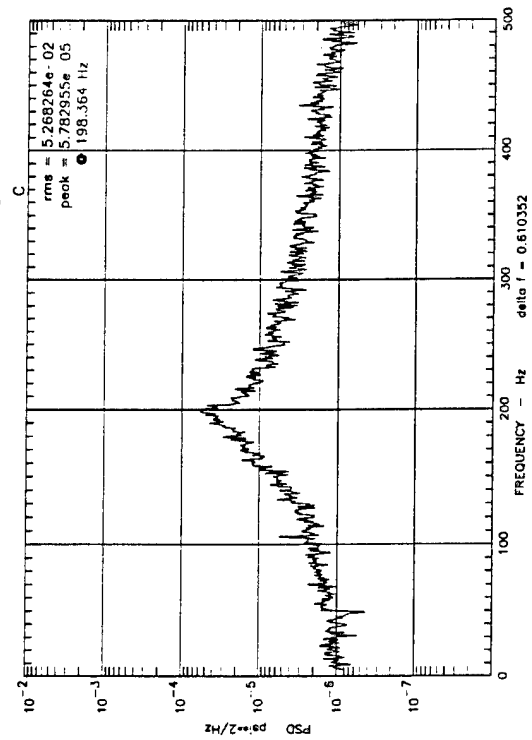
F-15 TPN\_3075: q=56 alpha=20 beta=-4 bp@n&g



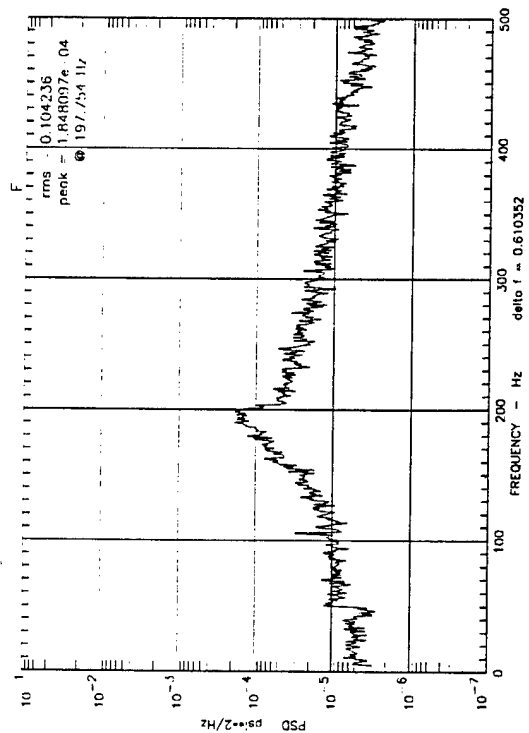
F-15 TPN\_3075: q=56 alpha=20 beta=-4 bp@n&g



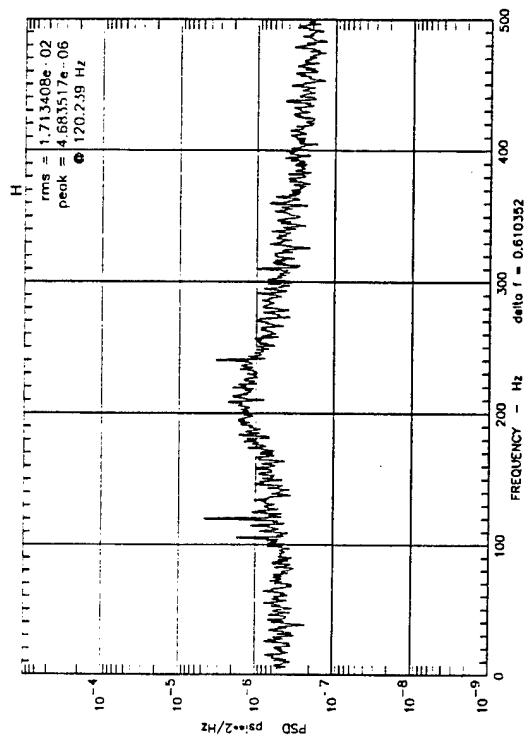
F-15 TPN\_3075: q=56 alpha=20 beta=-4 bp@n&g



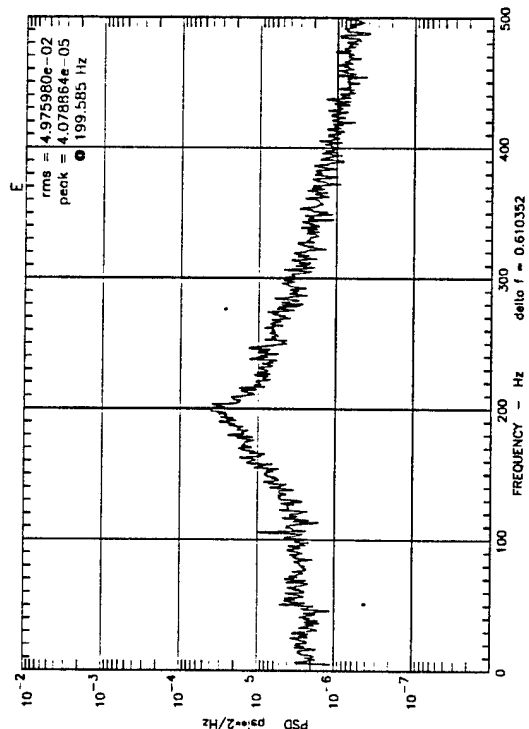
F-15 TPN\_3075; q=56 alpha=20 beta=-4 bp@n&g



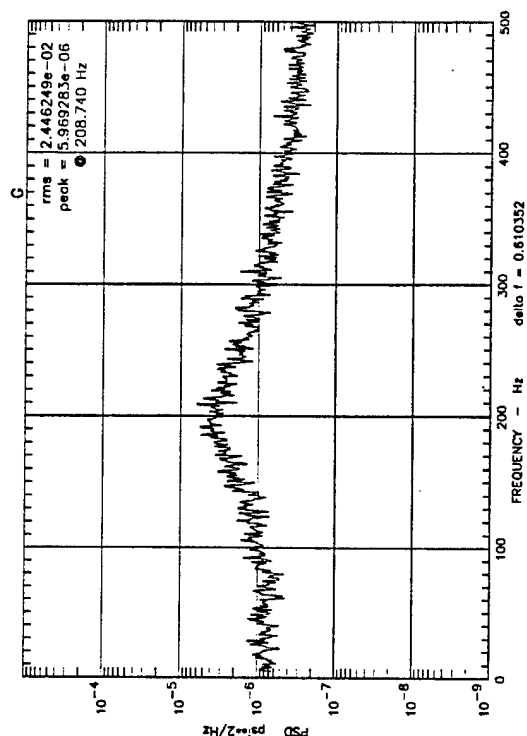
F-15 TPN\_3075; q=56 alpha=20 beta=-4 bp@n&g



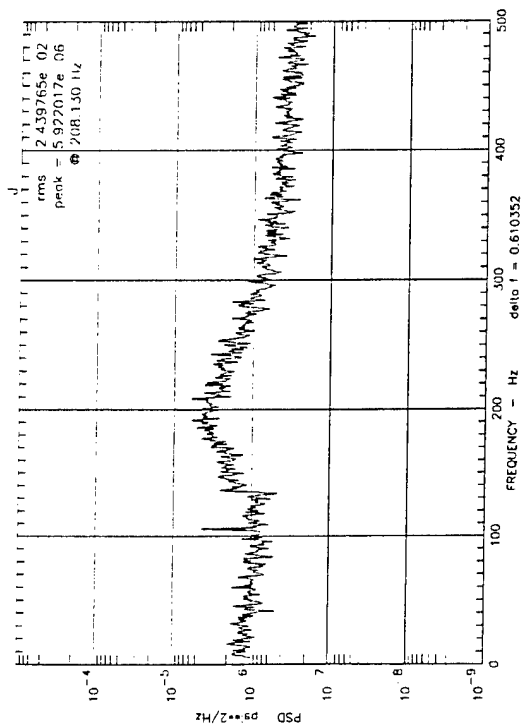
F-15 TPN\_3075; q=56 alpha=20 beta=-4 bp@n&g



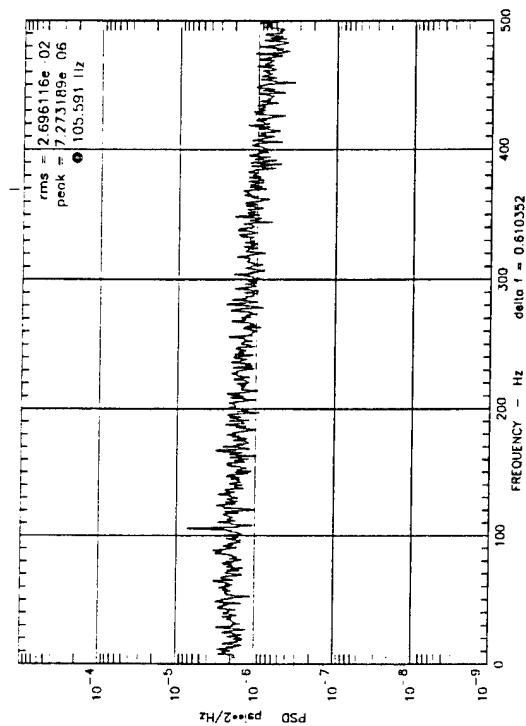
F-15 TPN\_3075; q=56 alpha=20 beta=-4 bp@n&g



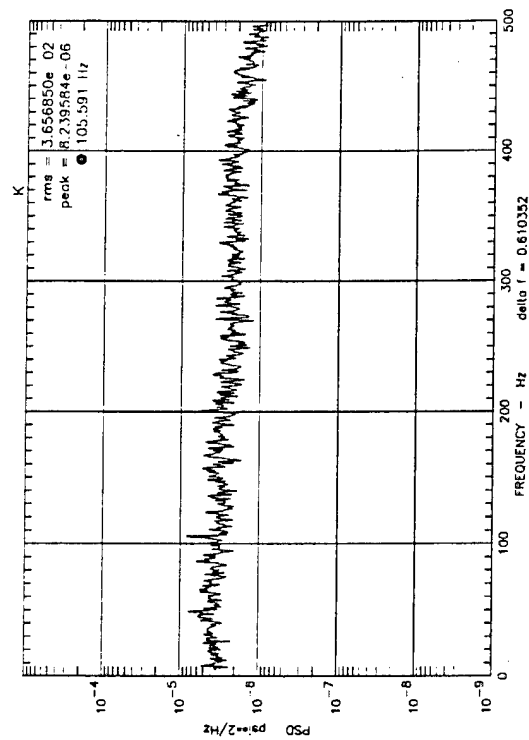
F 15 TPN 3075: q=56 alpha=20 beta=-4 bp@n&g



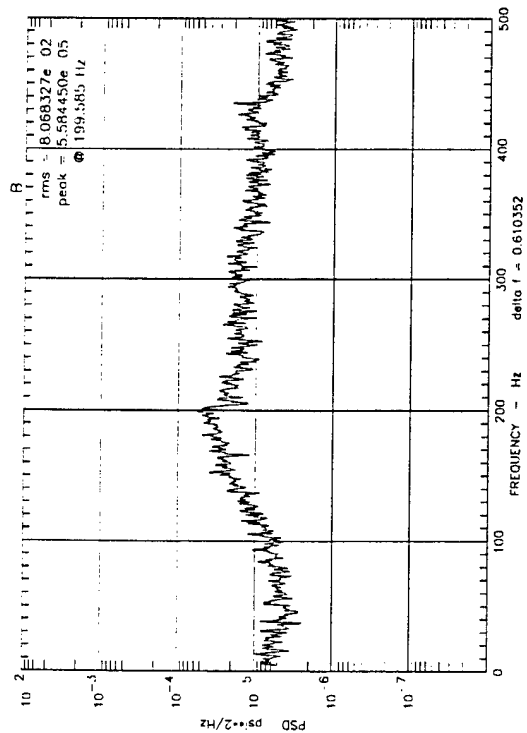
F 15 TPN 3075: q=56 alpha=20 beta=-4 bp@n&g



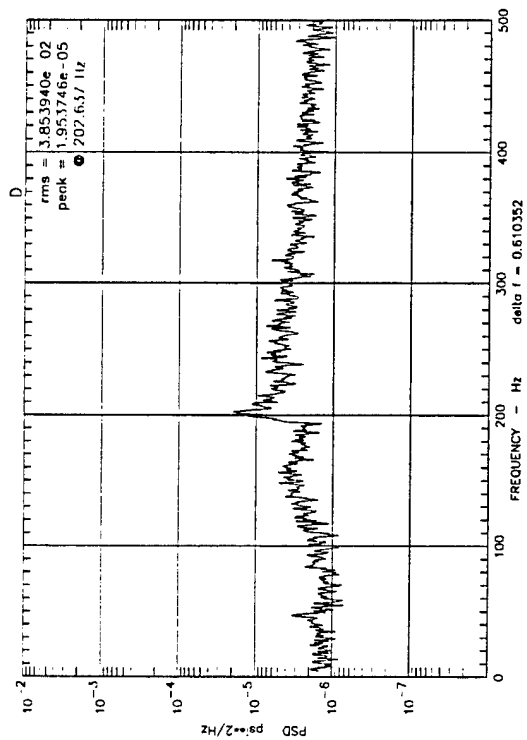
F 15 TPN 3075: q=56 alpha=20 beta=-4 bp@n&g



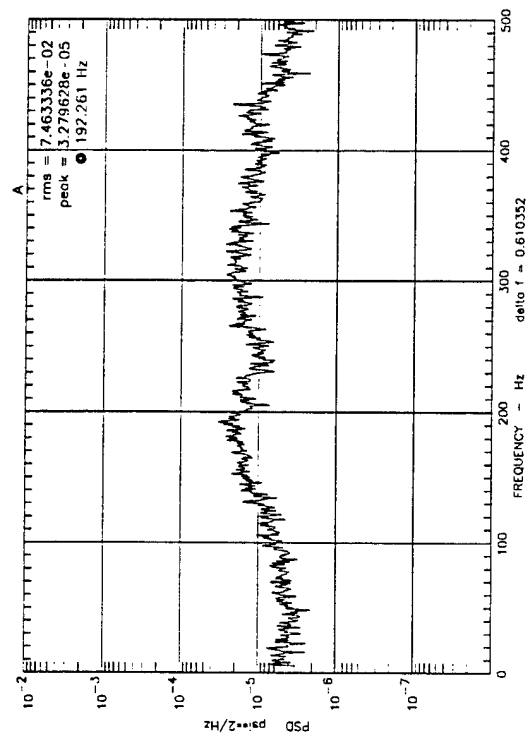
F-15 TPN\_3077: q=56 alpha=24 beta=-4 bp@n&g



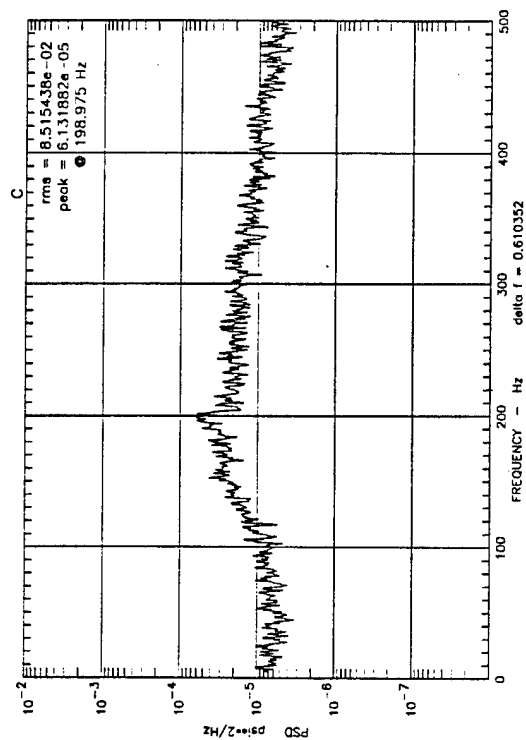
F-15 TPN\_3077: q=56 alpha=24 beta=-4 bp@n&g



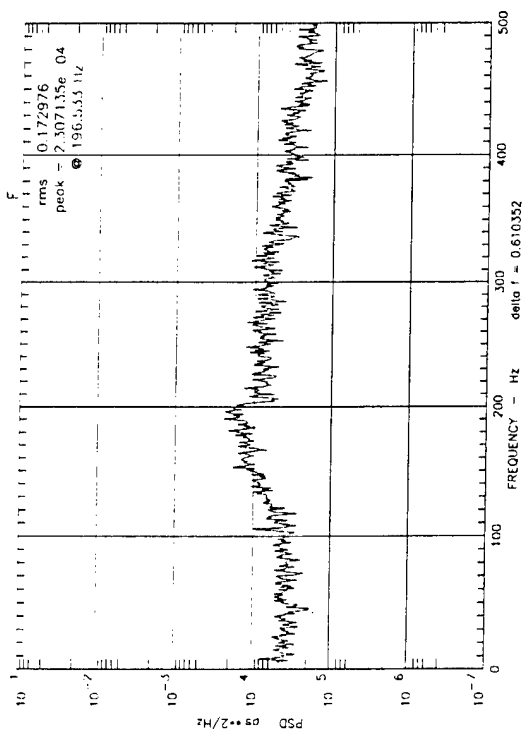
F-15 TPN\_3077: q=56 alpha=24 beta=-4 bp@n&g



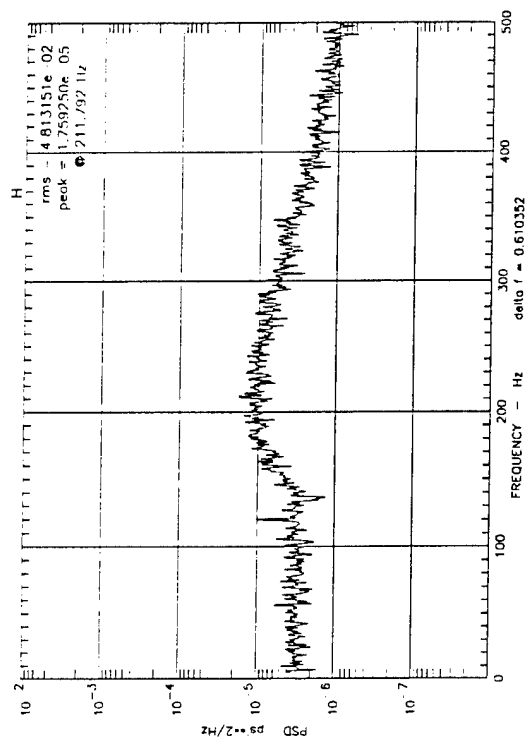
F-15 TPN\_3077: q=56 alpha=24 beta=-4 bp@n&g



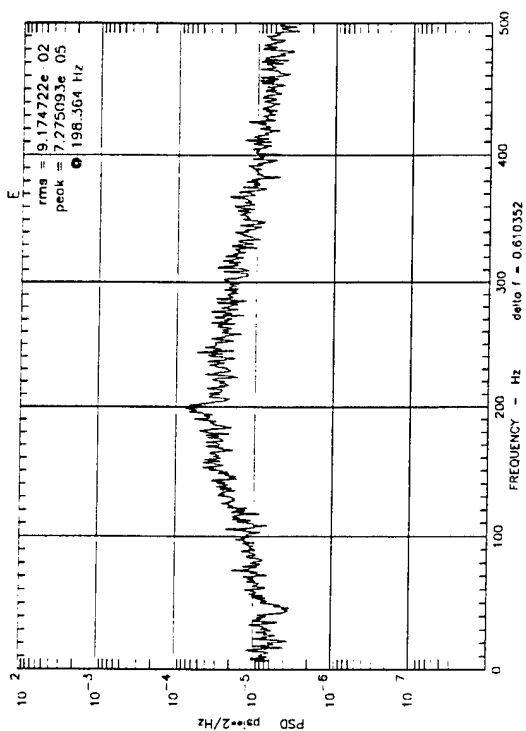
F 15 TPN\_3077: q=56 alpha=24 beta=-4 bp@n&q



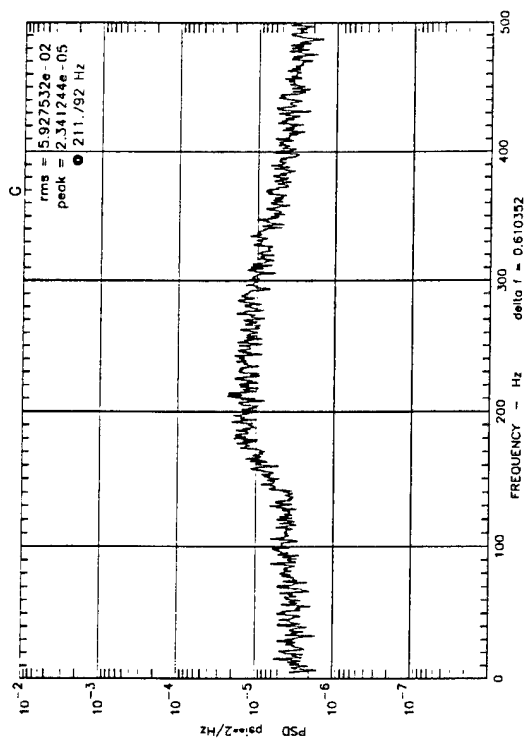
F 15 TPN\_3077: q=56 alpha=24 beta=-4 bp@n&q



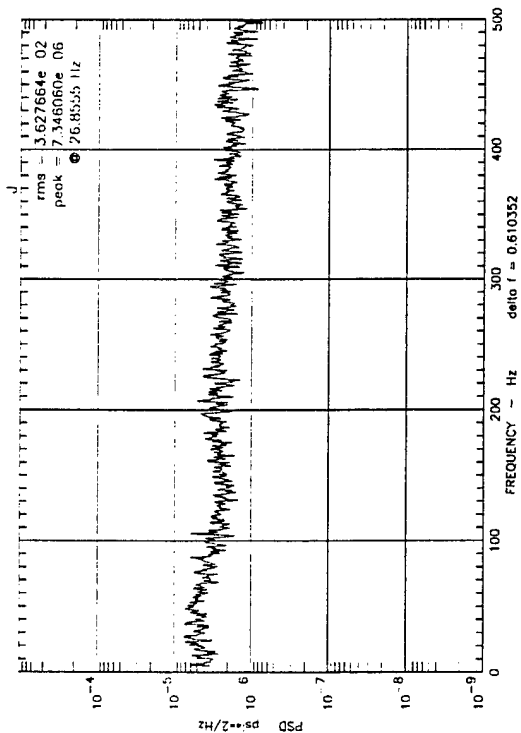
F 15 TPN\_3077: q=56 alpha=24 beta=-4 bp@n&q



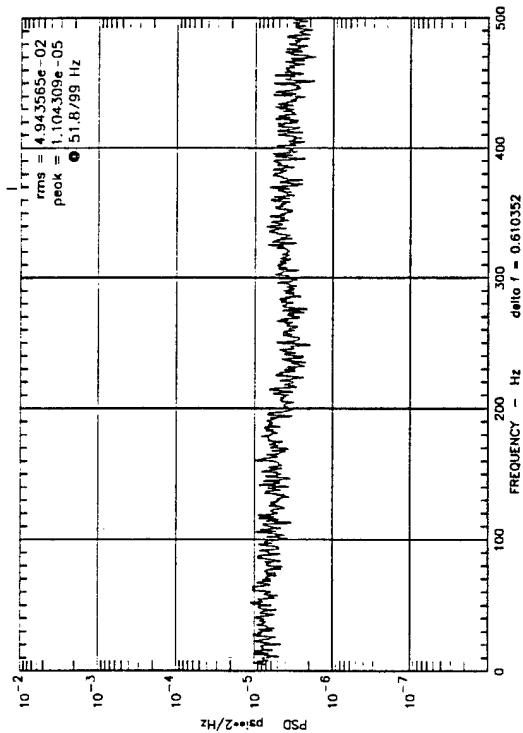
F 15 TPN\_3077: q=56 alpha=24 beta=-4 bp@n&q



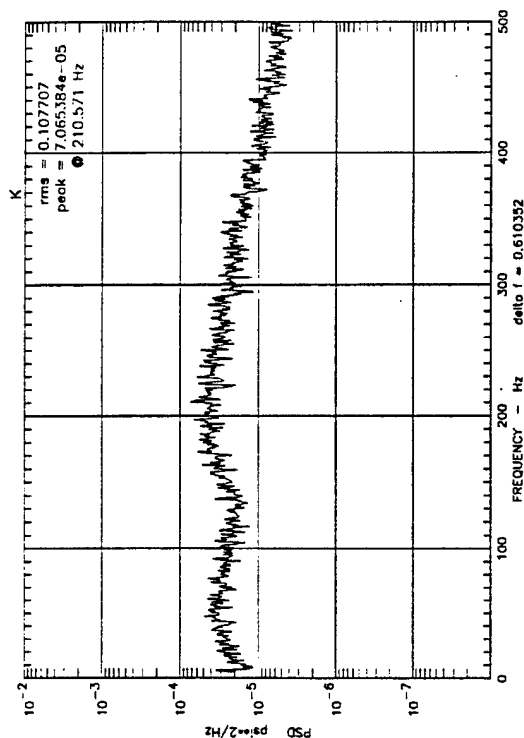
F 15 TPN\_3077: q=56 alpha=24 beta=-4 bp@n&g

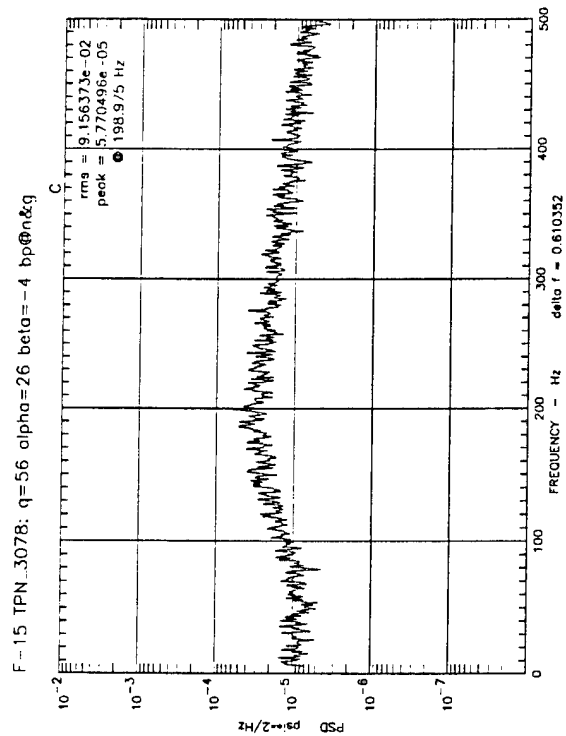
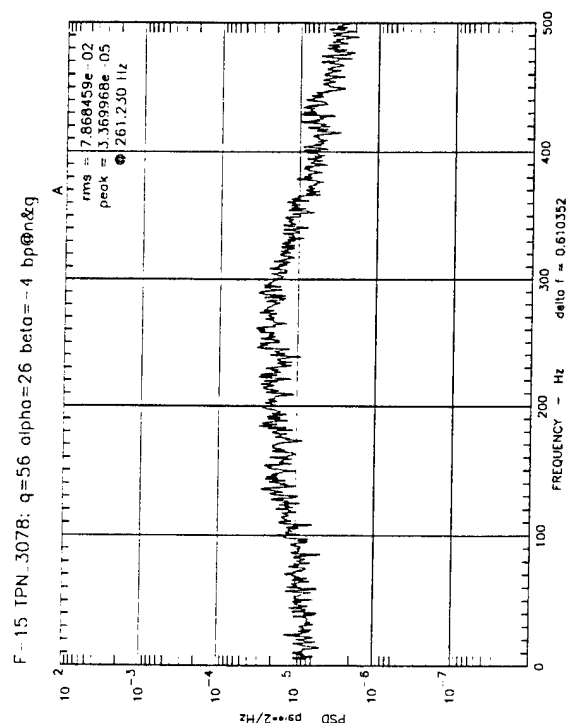
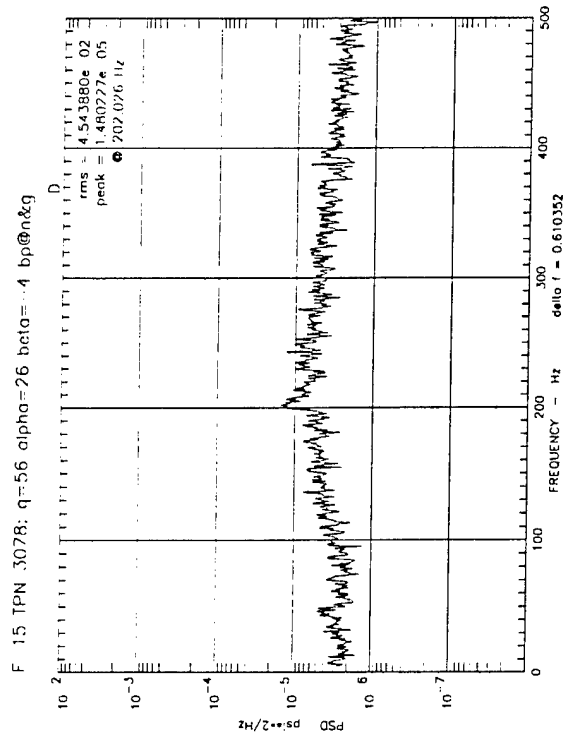
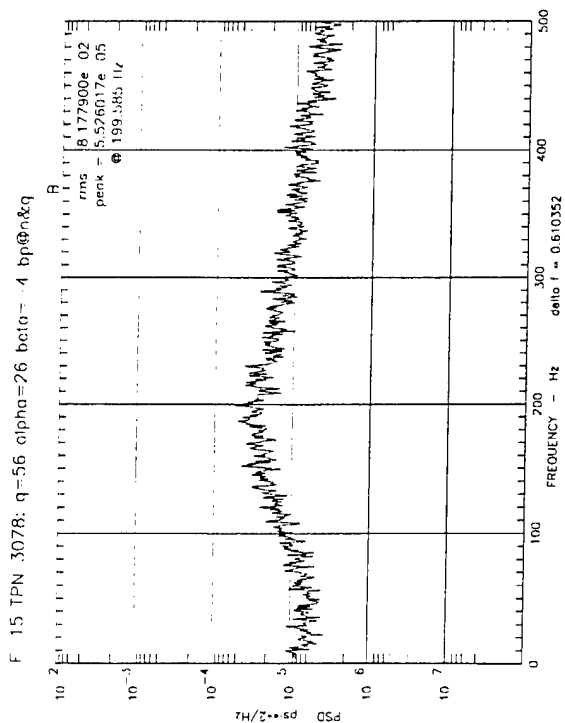


F-15 TPN\_3077: q=56 alpha=24 beta=-4 bp@n&g

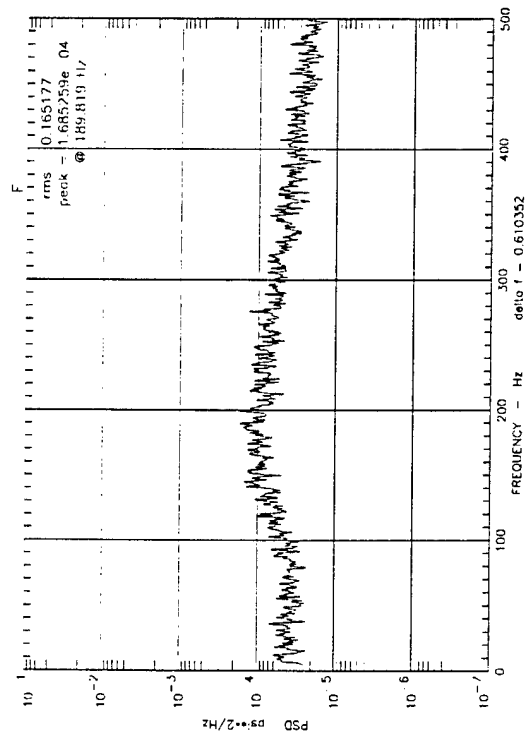


F-15 TPN\_3077: q=56 alpha=24 beta=-4 bp@n&g

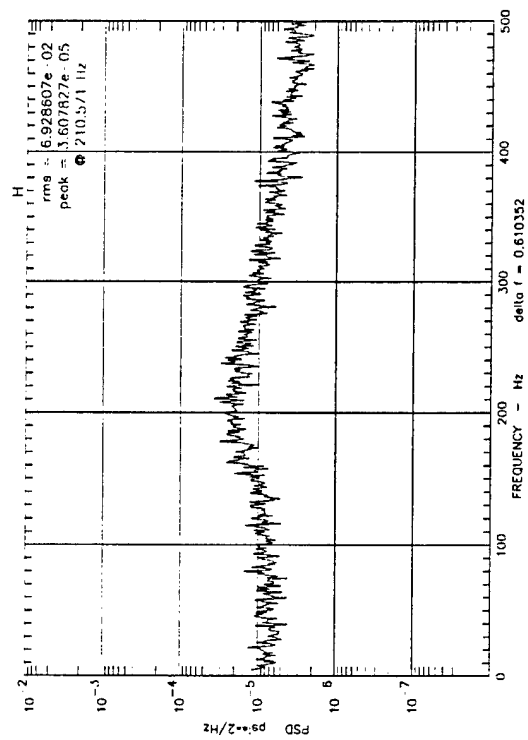




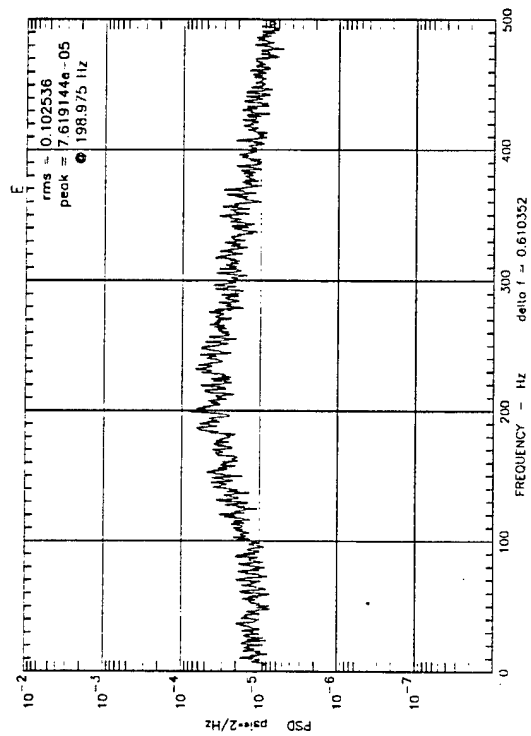
F-15 TPN\_3078: q=56 alpha=26 beta=-4 bp@n&g



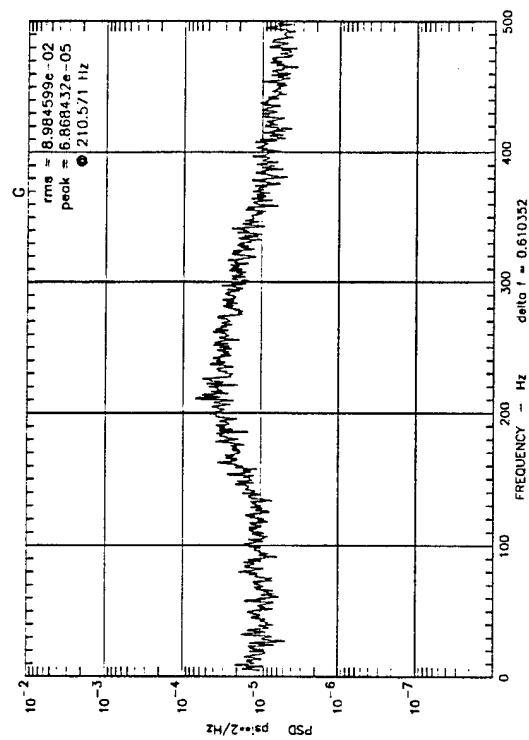
F-15 TPN\_3078: q=56 alpha=26 beta=-4 bp@n&g



F-15 TPN\_3078: q=56 alpha=26 beta=-4 bp@n&g

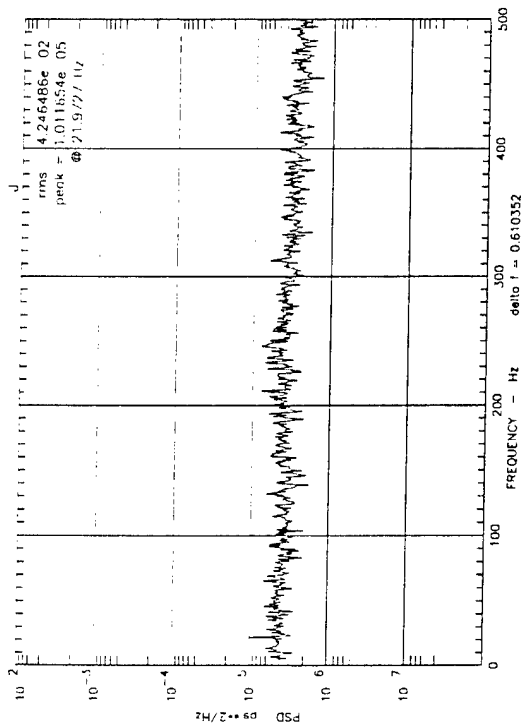


F-15 TPN\_3078: q=56 alpha=26 beta=-4 bp@n&g

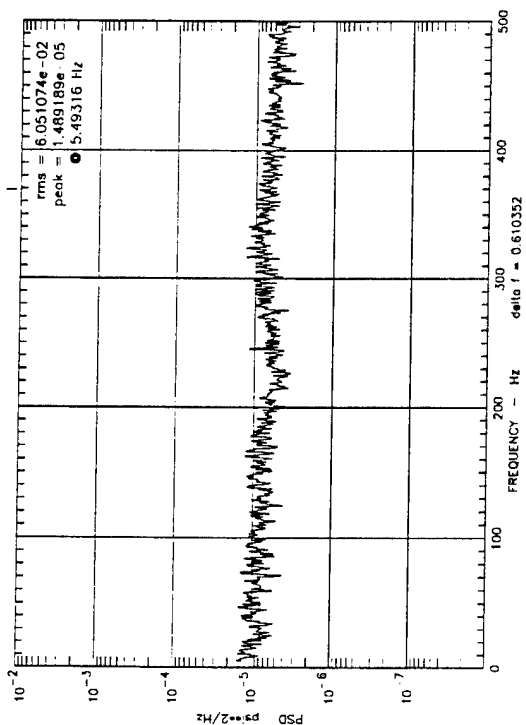




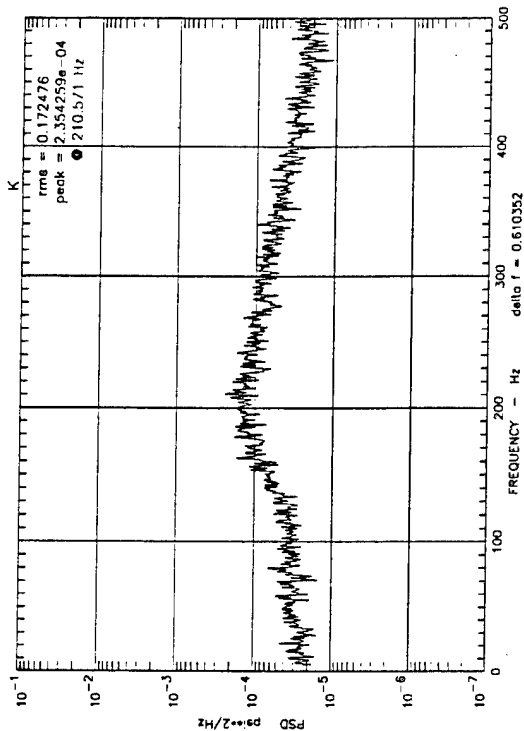
F 15 TPN 3078: q=56 alpha=26 beta= 4 bp@n&g



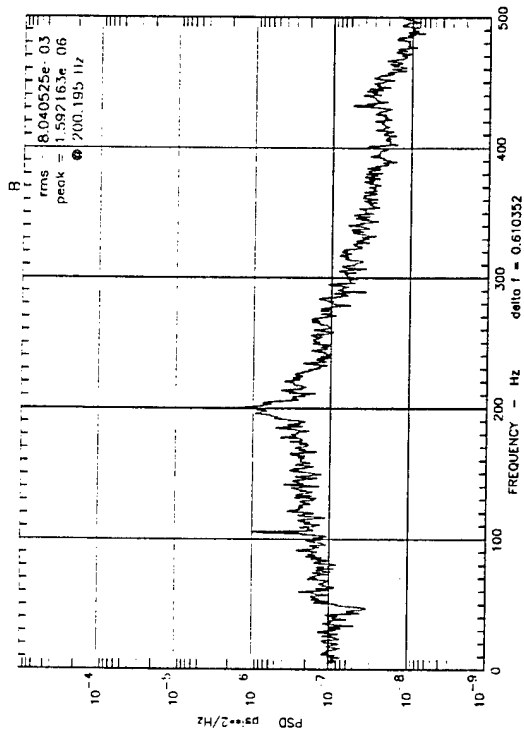
F-15 TPN 3078: q=56 alpha=26 beta=-4 bp@n&g



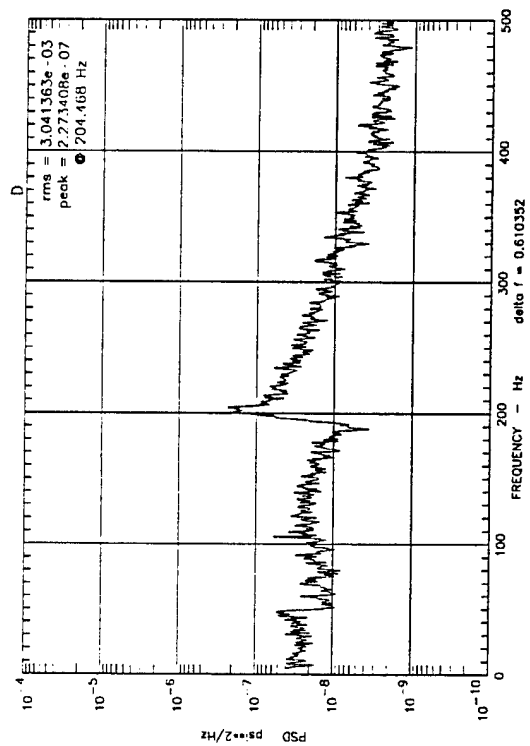
F-15 TPN 3078: q=56 alpha=26 beta=-4 bp@n&g



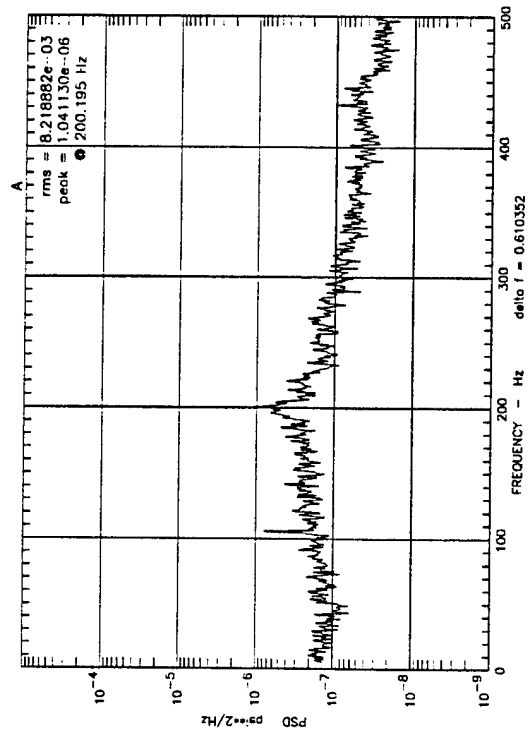
F-15 TPN\_3079: q=56 alpha=16 beta=0 bp@n&g



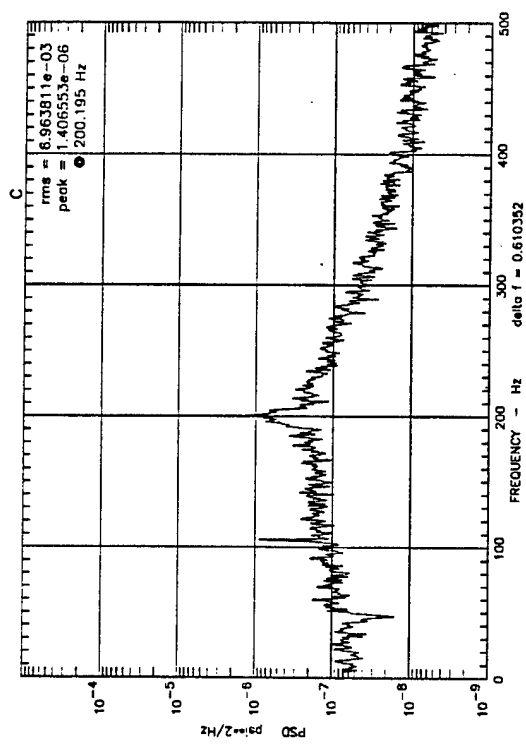
F-15 TPN\_3079: q=56 alpha=16 beta=0 bp@n&g



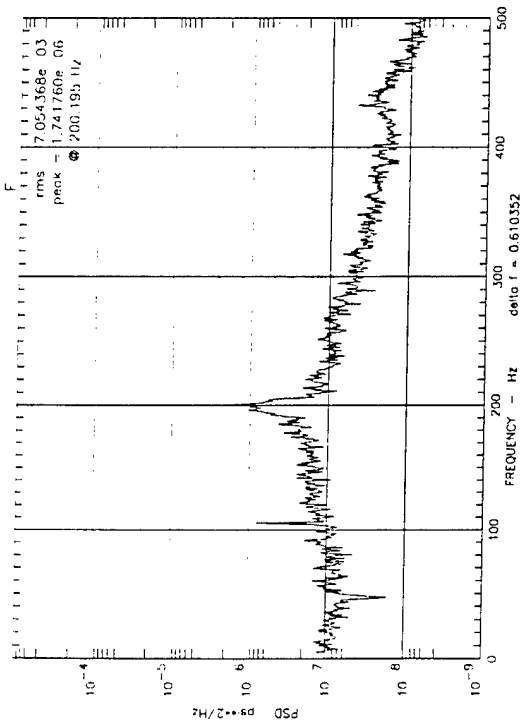
F-15 TPN\_3079: q=56 alpha=16 beta=0 bp@n&g



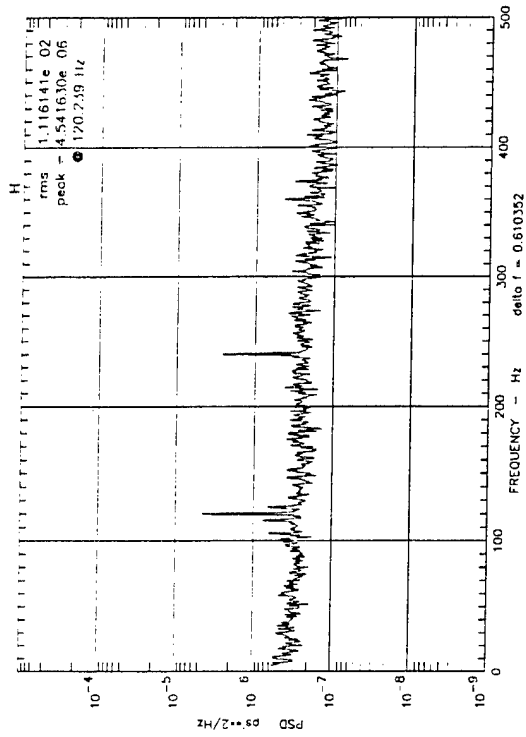
F-15 TPN\_3079: q=56 alpha=16 beta=0 bp@n&g



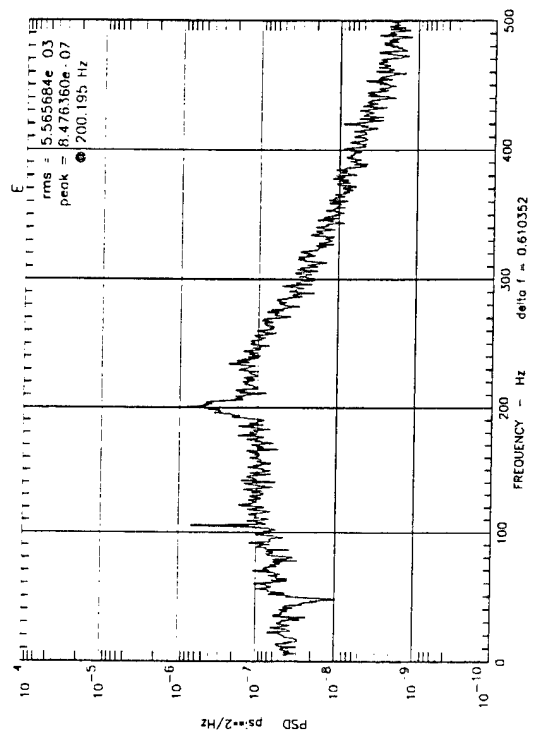
F 15 TPN .3079: q=56 alpha=16 beta=0 bp@n&q



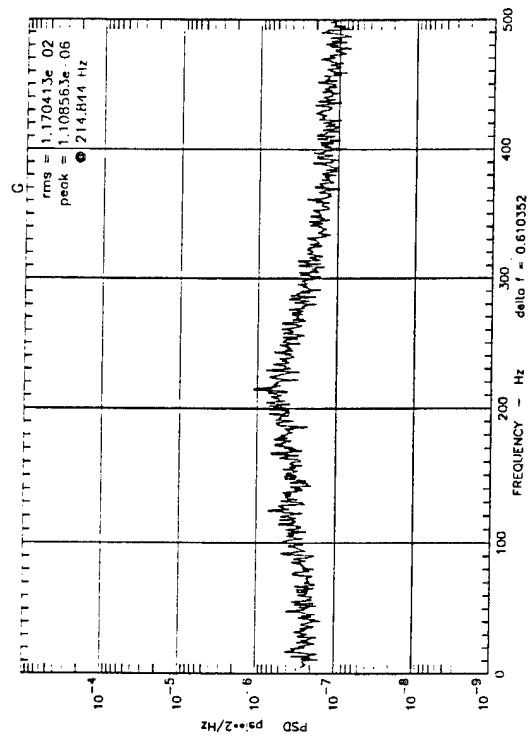
F 15 TPN .3079: q=56 alpha=16 beta=0 bp@n&q



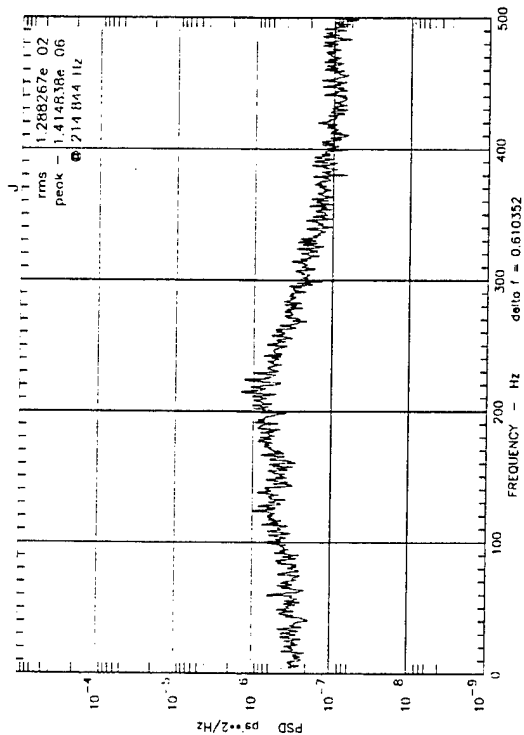
F 15 TPN .3079: q=56 alpha=16 beta=0 bp@n&q



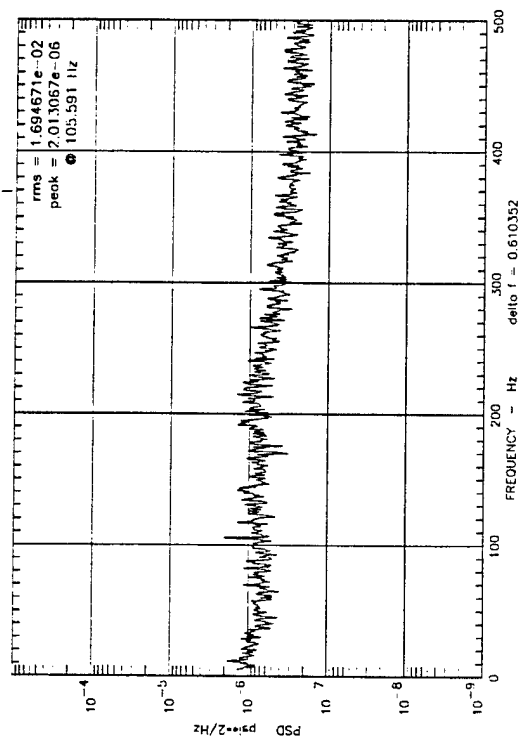
F 15 TPN .3079: q=56 alpha=16 beta=0 bp@n&q



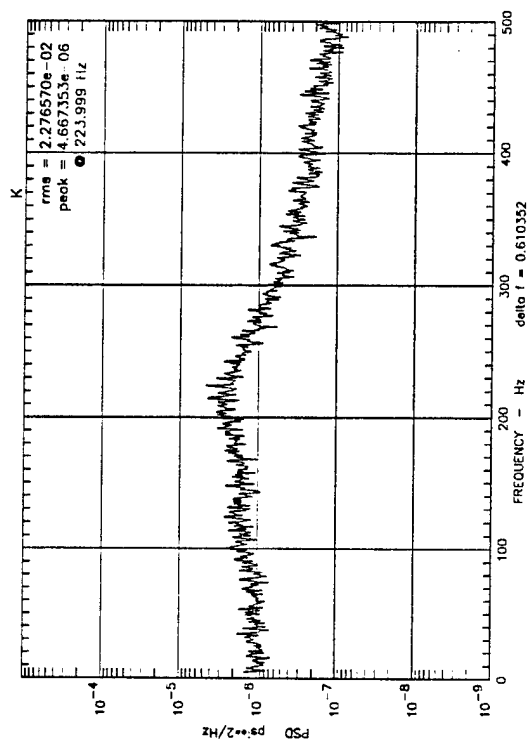
F-15 TPN\_3079: q=56 alpha=16 beta=0 bp@n&g



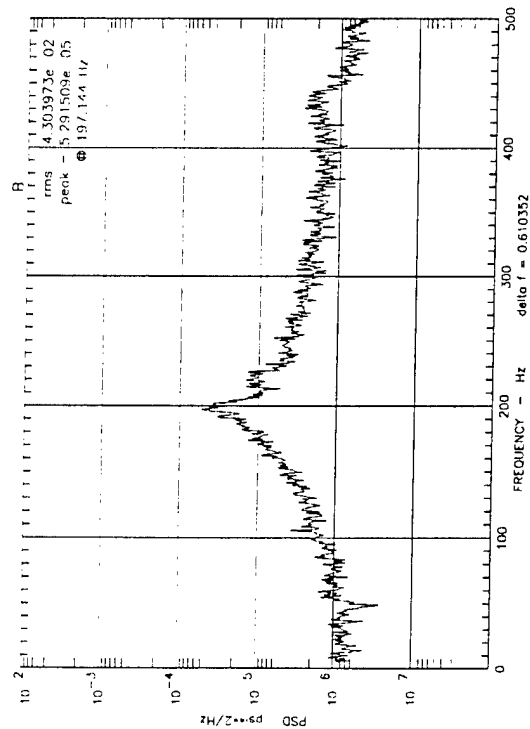
F-15 TPN\_3079: q=56 alpha=16 beta=0 bp@n&g



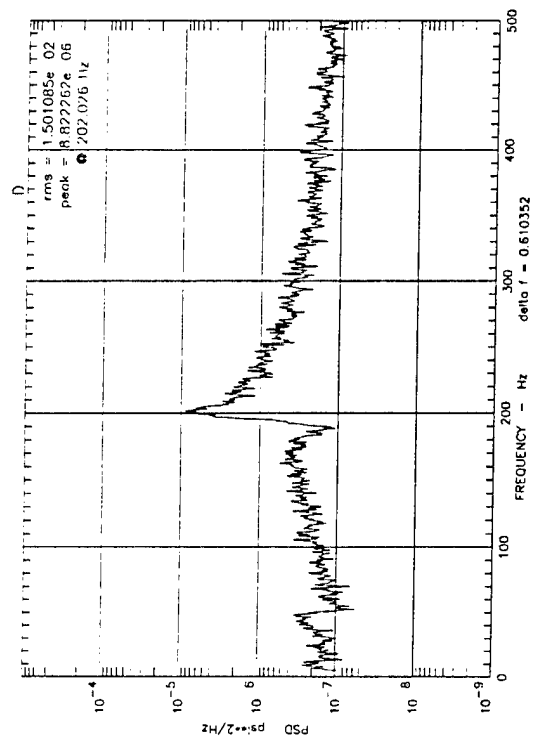
F-15 TPN\_3079: q=56 alpha=16 beta=0 bp@n&g



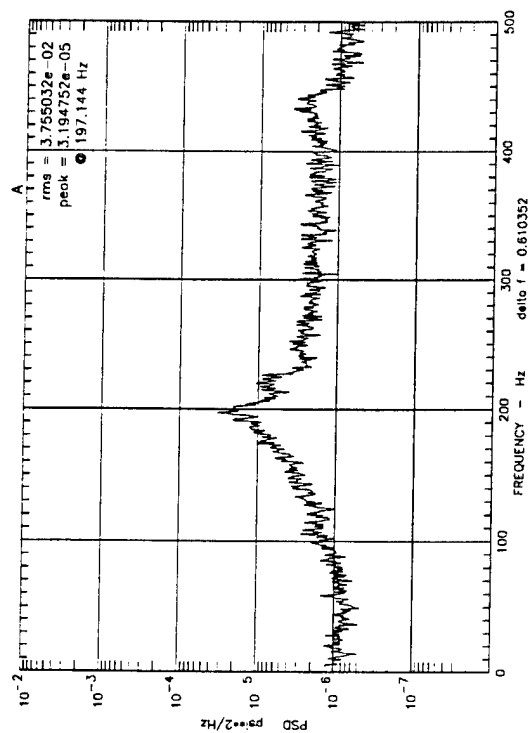
F 15 TPN\_3081: q=56 alpha=20 beta=0 bp@n&g



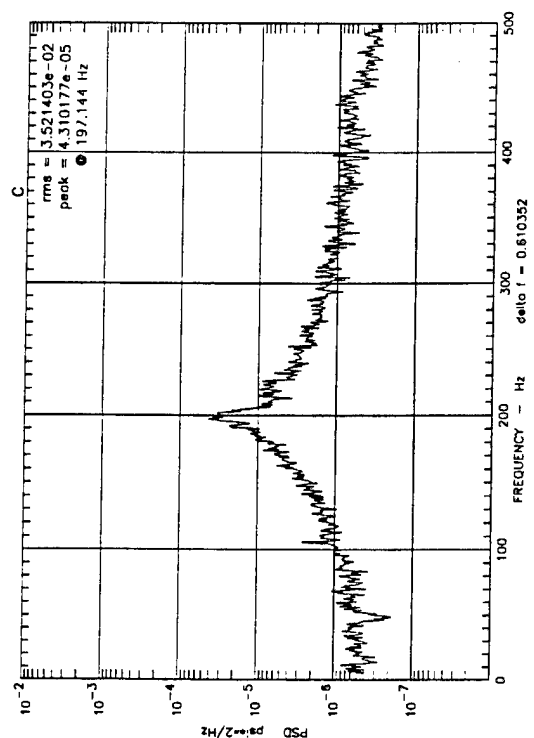
F-15 TPN\_3081: q=56 alpha=20 beta=0 bp@n&g



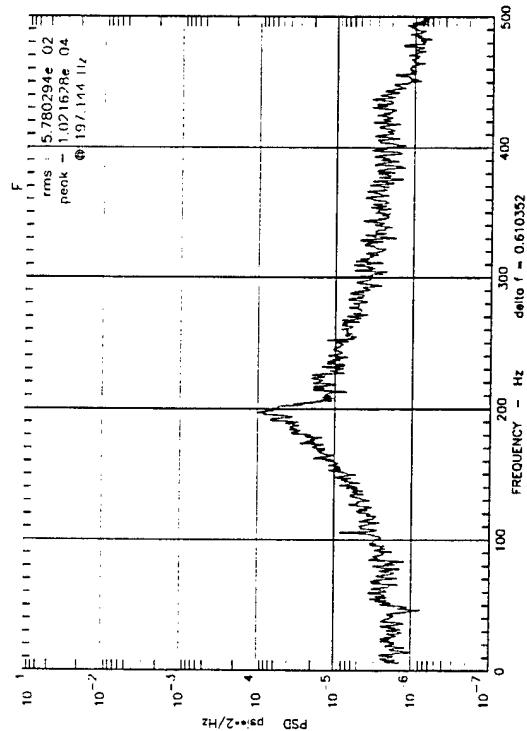
F-15 TPN\_3081: q=56 alpha=20 beta=0 bp@n&g



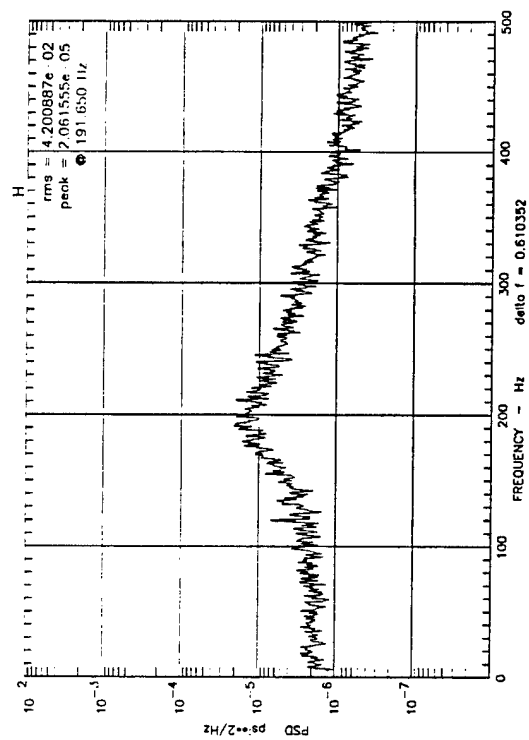
F-15 TPN\_3081: q=56 alpha=20 beta=0 bp@n&g



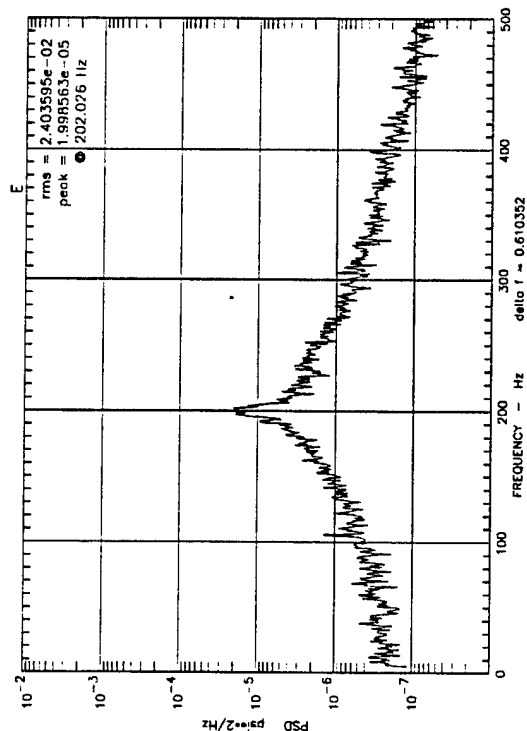
F-15 TPN\_3081: q=56 alpha=20 beta=0 bp@n&g



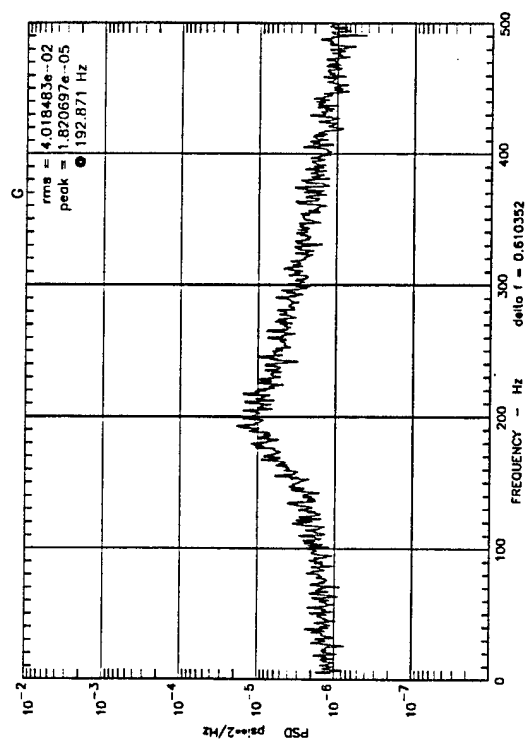
F-15 TPN\_3081: q=56 alpha=20 beta=0 bp@n&g



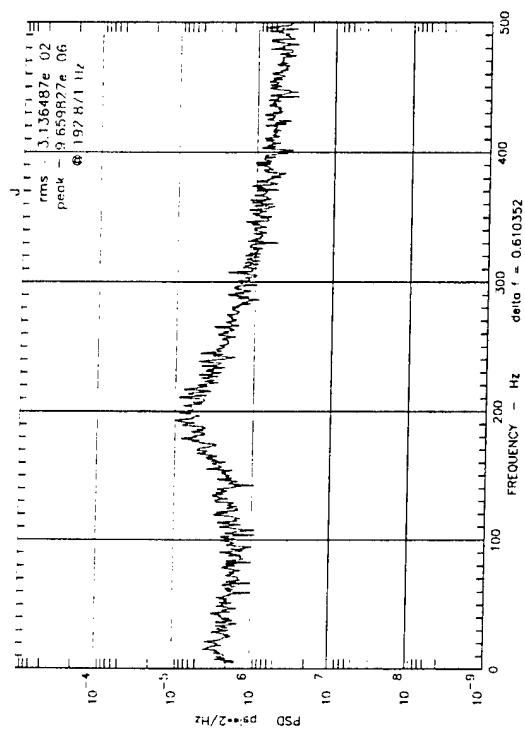
F-15 TPN\_3081: q=56 alpha=20 beta=0 bp@n&g



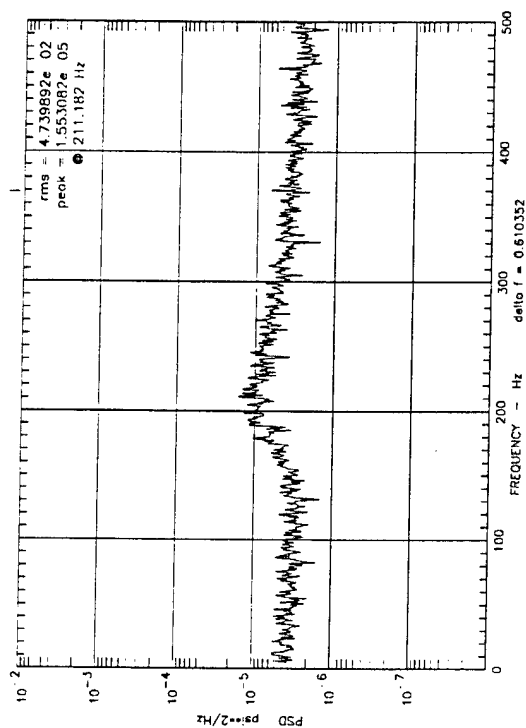
F-15 TPN\_3081: q=56 alpha=20 beta=0 bp@n&g



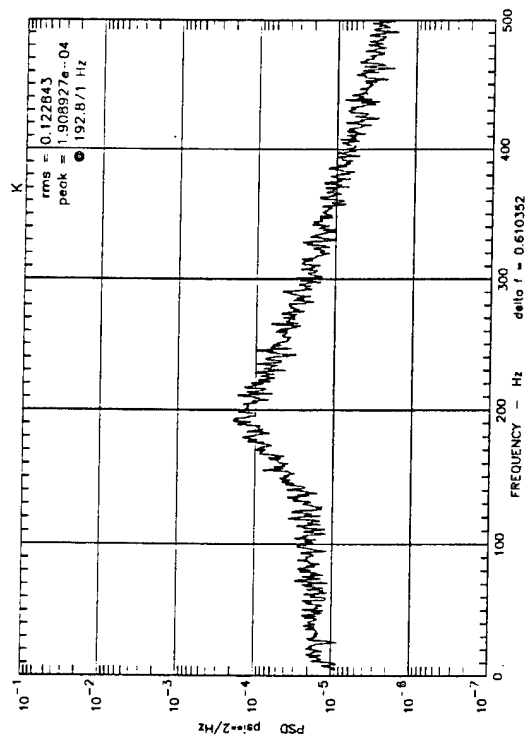
F-15 TPN\_3081: q=56 alpha=20 beta=0 bp@n&g



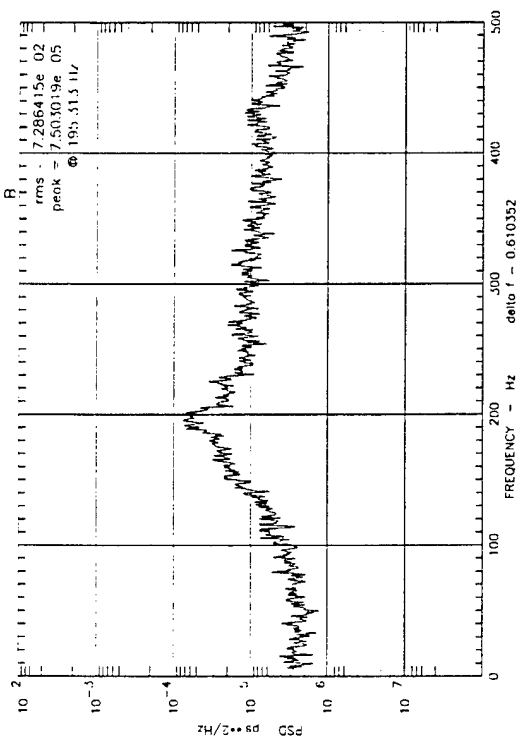
F-15 TPN\_3081: q=56 alpha=20 beta=0 bp@n&g



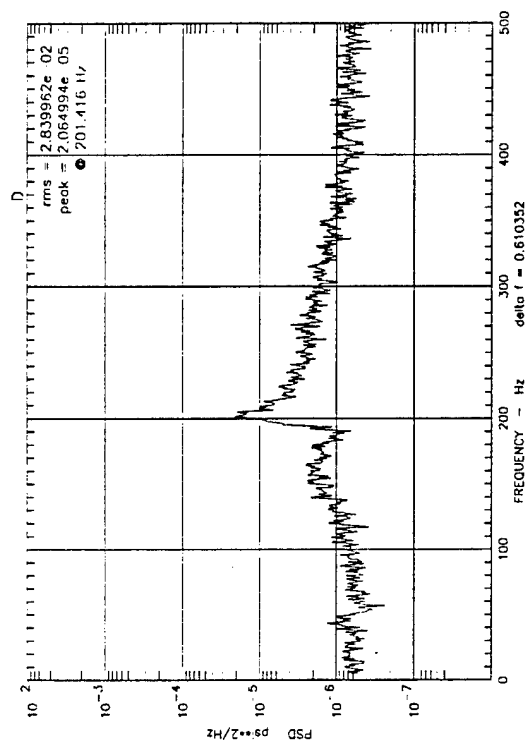
F-15 TPN\_3081: q=56 alpha=20 beta=0 bp@n&g



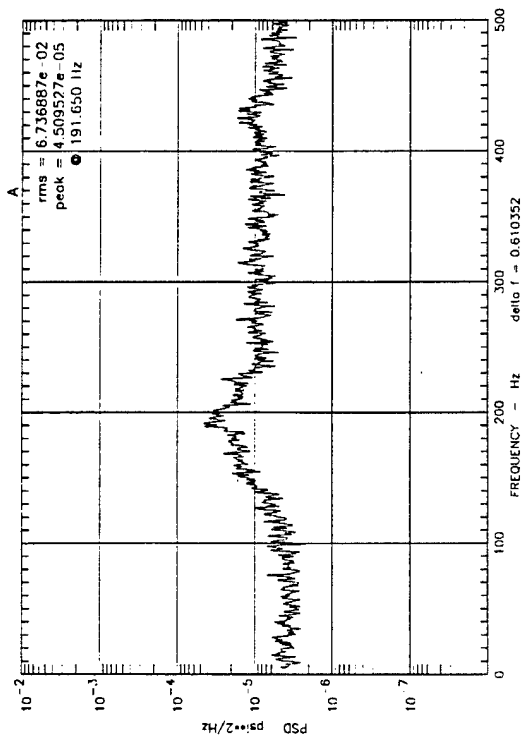
F 15 TPN 3083: q=56 alpha=24 beta=0 bp@n&g



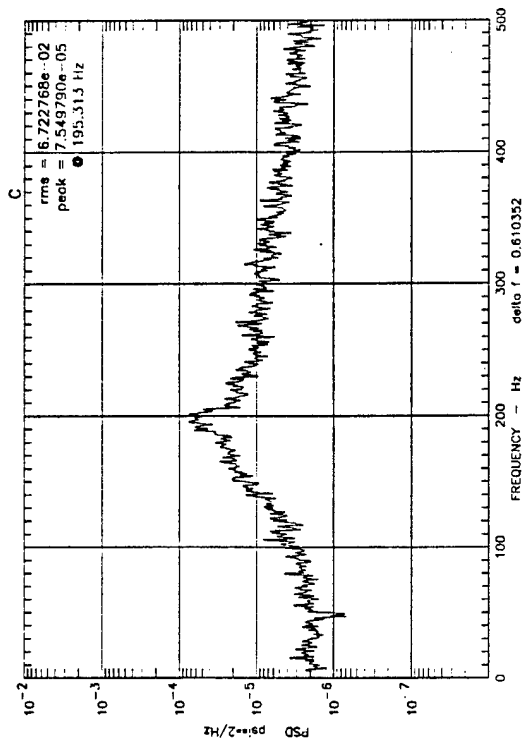
F 15 TPN 3083: q=56 alpha=24 beta=0 bp@n&g



F 15 TPN 3083: q=56 alpha=24 beta=0 bp@n&g

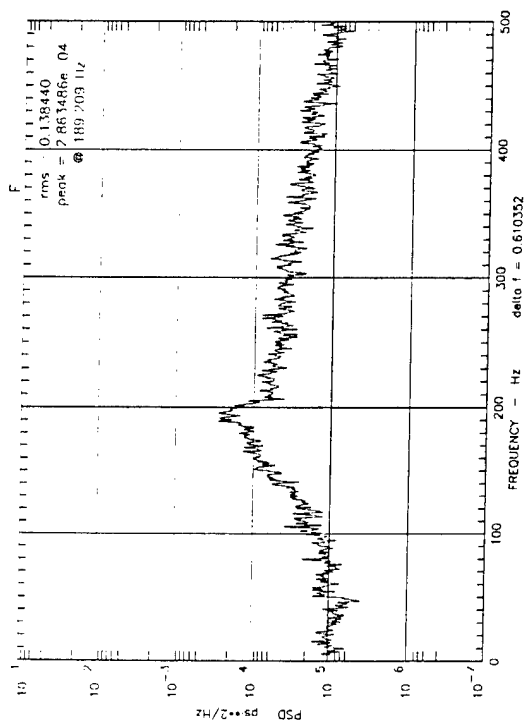


F 15 TPN 3083: q=56 alpha=24 beta=0 bp@n&g

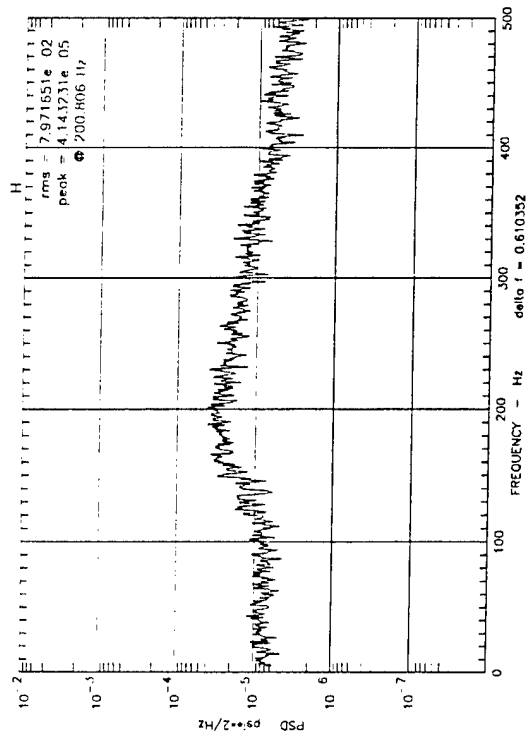




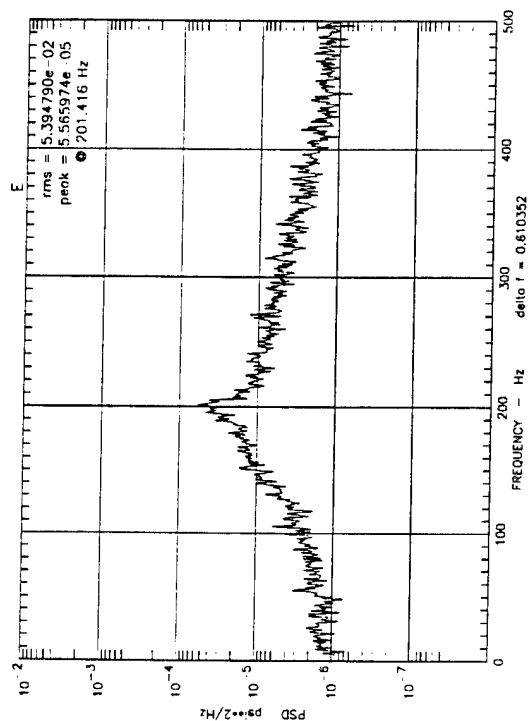
F 15 TPN 3083: q=56 alpha=24 beta=0 bp@n&amp;g



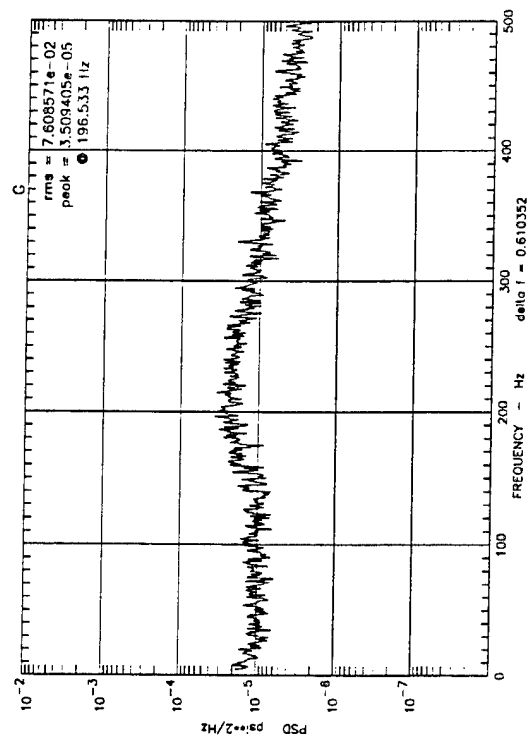
F 15 TPN 3083: q=56 alpha=24 beta=0 bp@n&amp;g



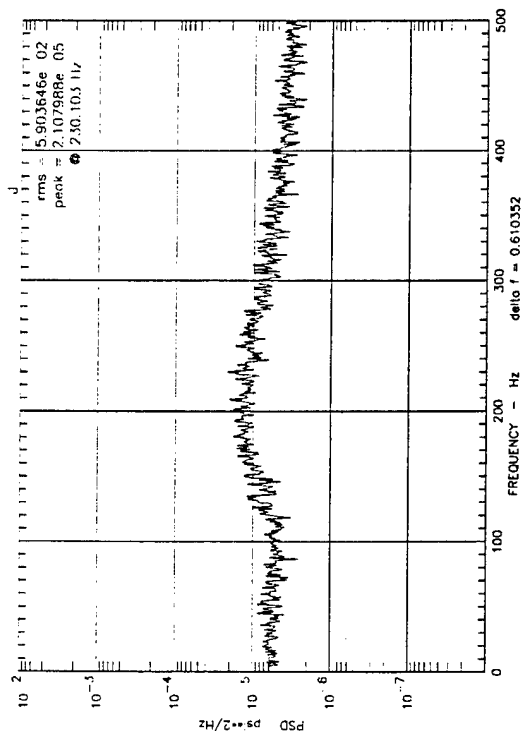
F 15 TPN 3083: q=56 alpha=24 beta=0 bp@n&amp;g



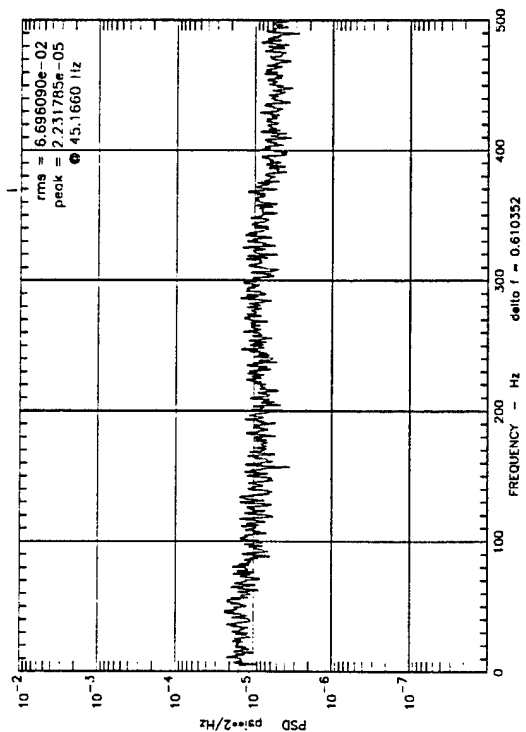
F 15 TPN 3083: q=56 alpha=24 beta=0 bp@n&amp;g



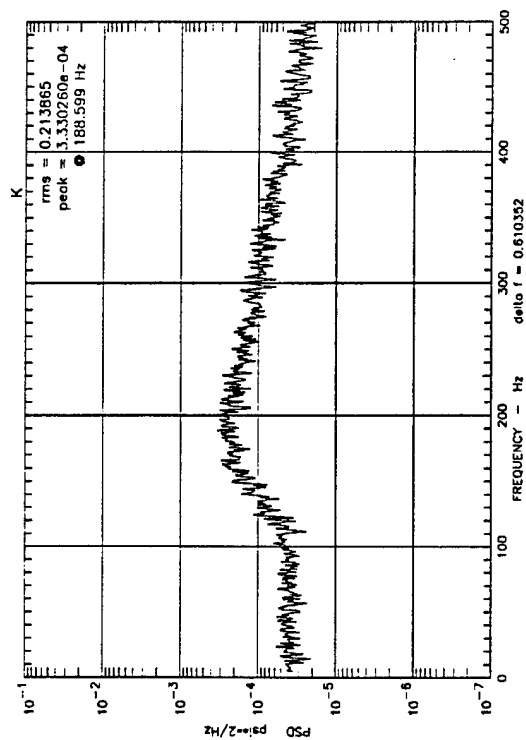
F 15 TPN\_3083: q=56 alpha=24 beta=0 bp@n&g



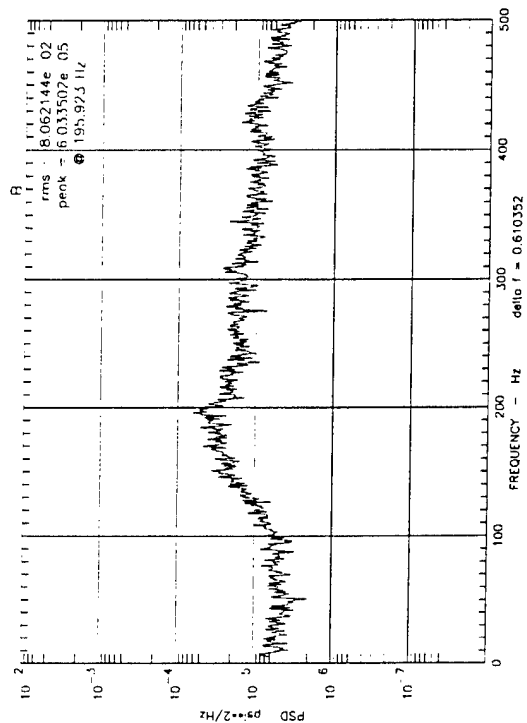
F 15 TPN\_3083: q=56 alpha=24 beta=0 bp@n&g



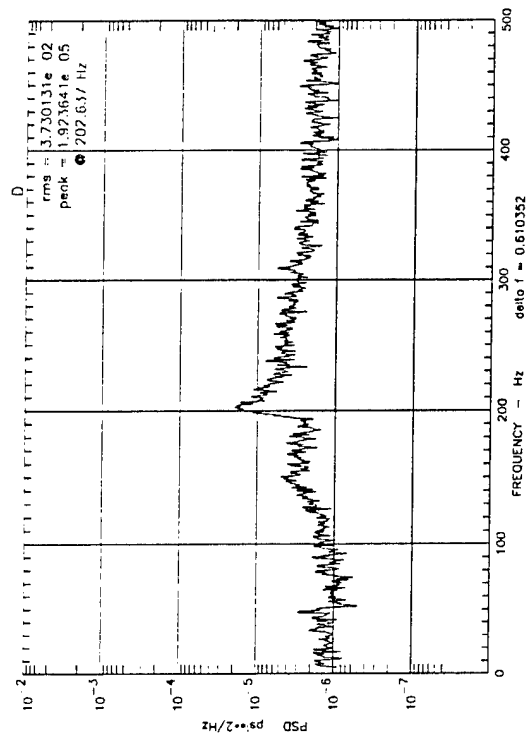
F 15 TPN\_3083: q=56 alpha=24 beta=0 bp@n&g



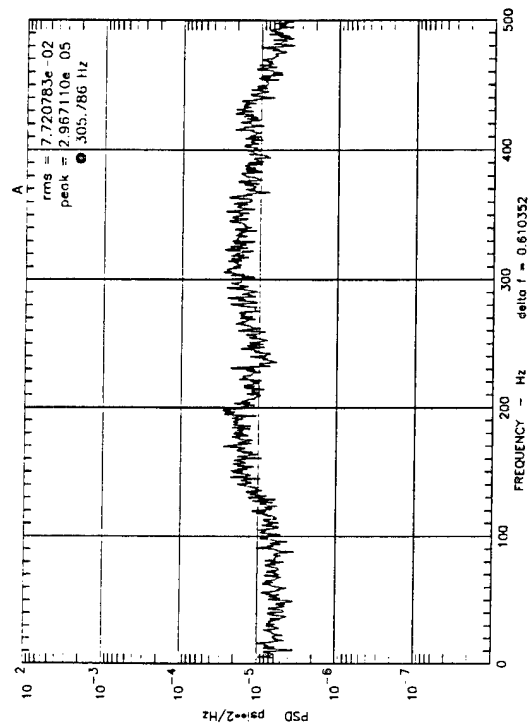
F-15 TPN\_3084: q=56 alpha=26 beta=0 bp@n&g



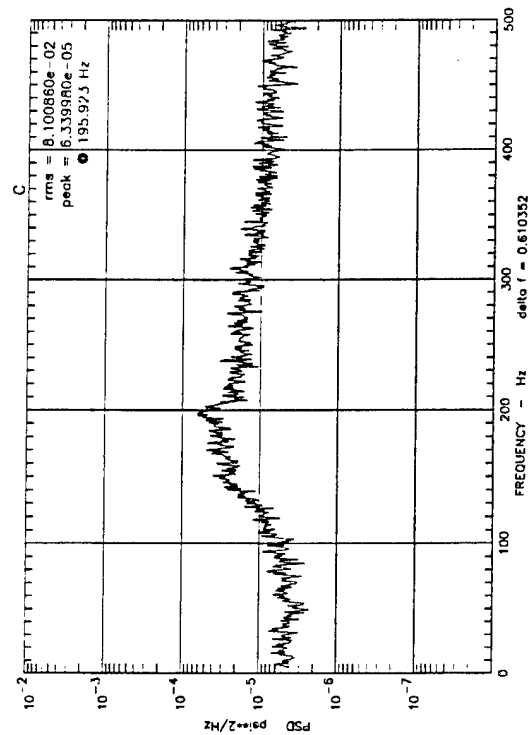
F-15 TPN\_3084: q=56 alpha=26 beta=0 bp@n&g



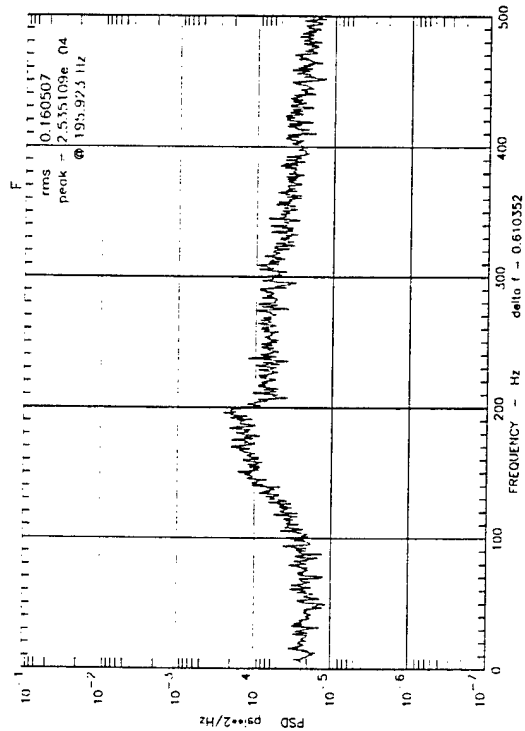
F-15 TPN\_3084: q=56 alpha=26 beta=0 bp@n&g



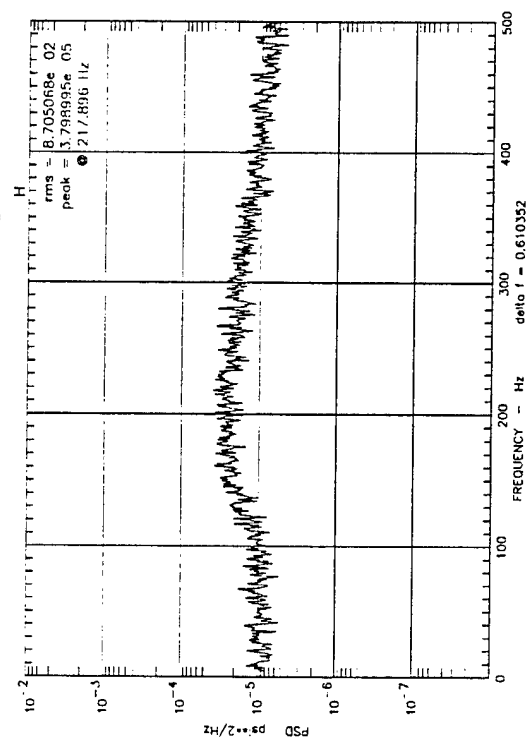
F-15 TPN\_3084: q=56 alpha=26 beta=0 bp@n&g



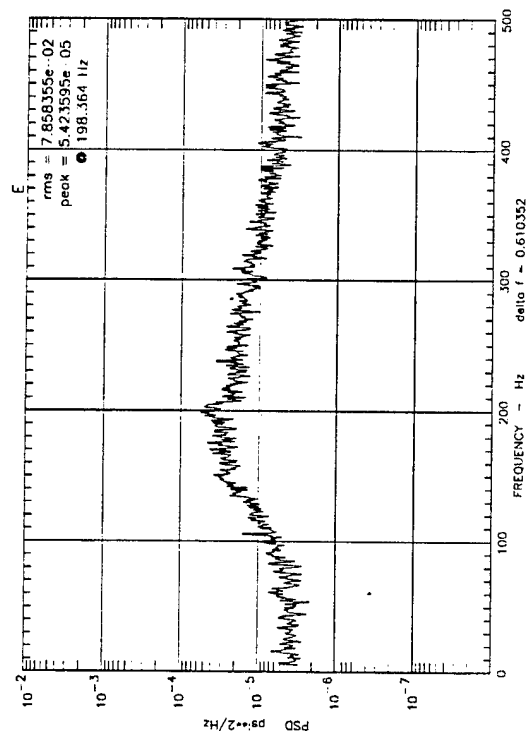
F-15 TPN\_3084; q=56 alpha=26 beta=0 bp@n&g



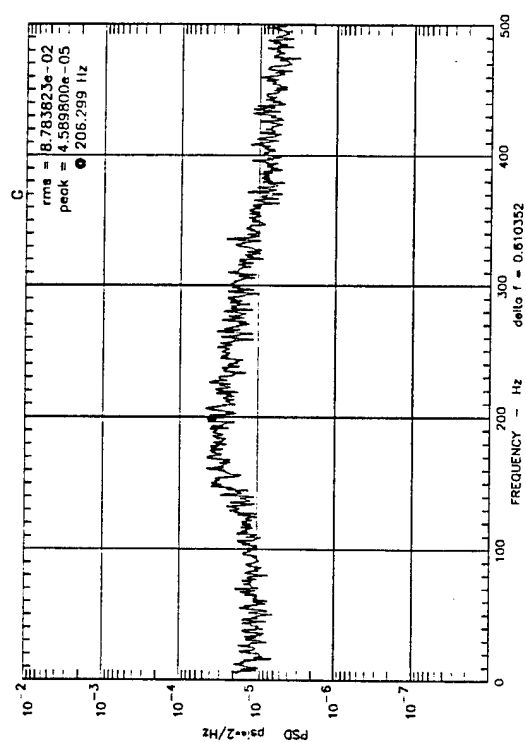
F-15 TPN\_3084; q=56 alpha=26 beta=0 bp@n&g

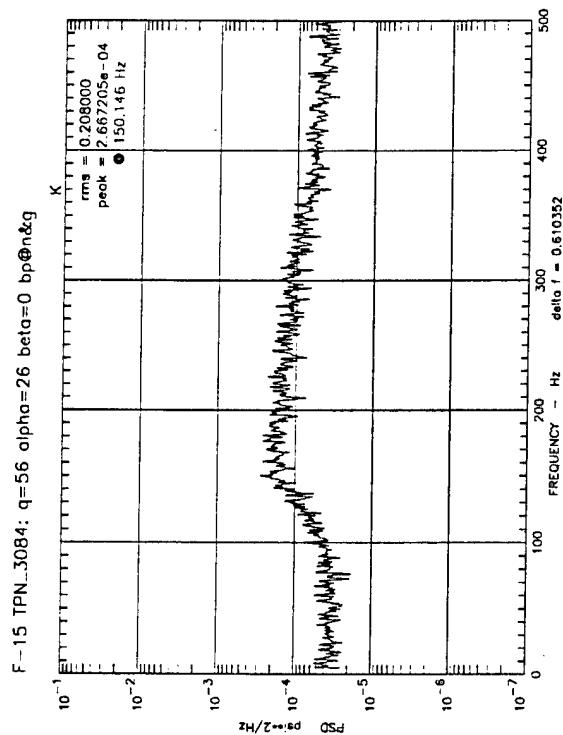
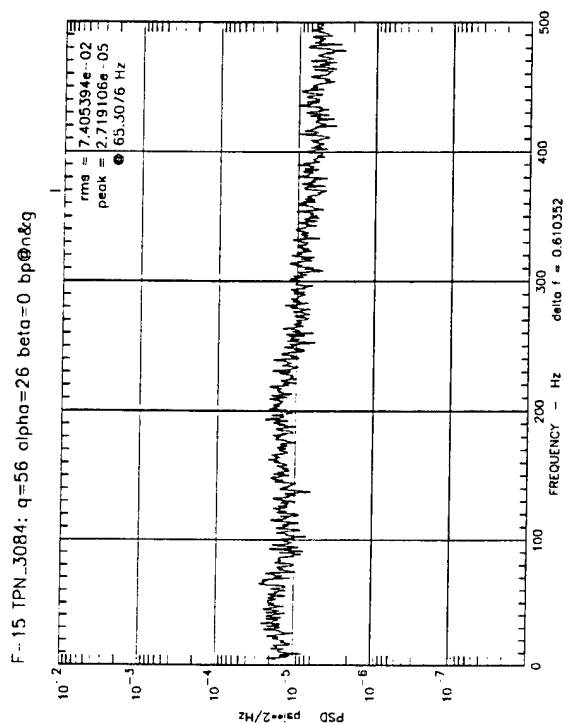
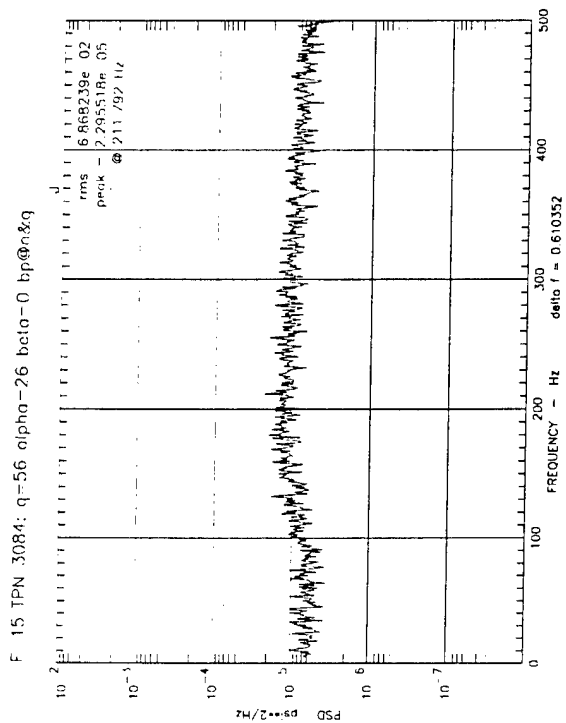


F-15 TPN\_3084; q=56 alpha=26 beta=0 bp@n&g

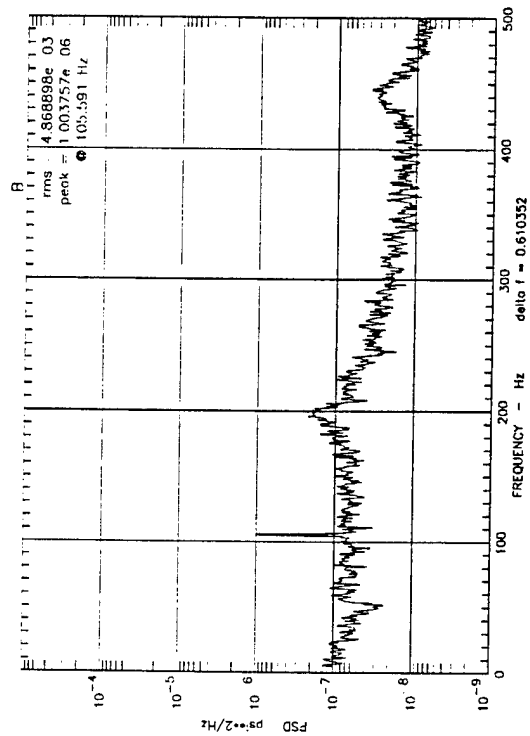


F-15 TPN\_3084; q=56 alpha=26 beta=0 bp@n&g

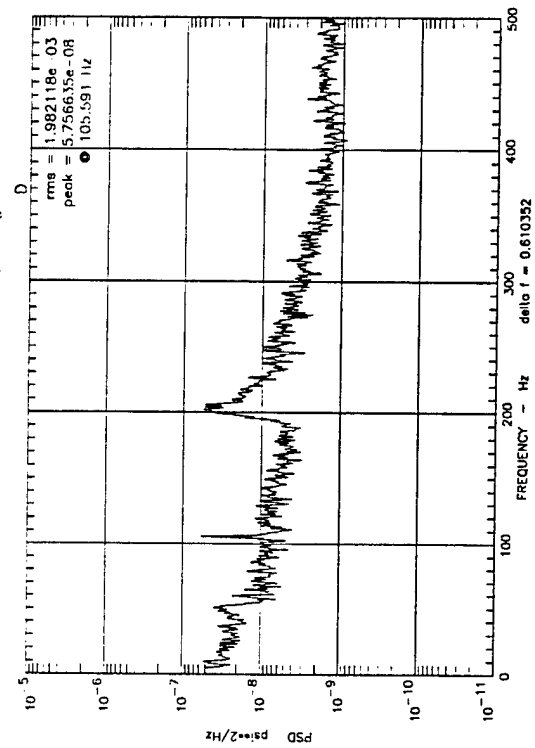




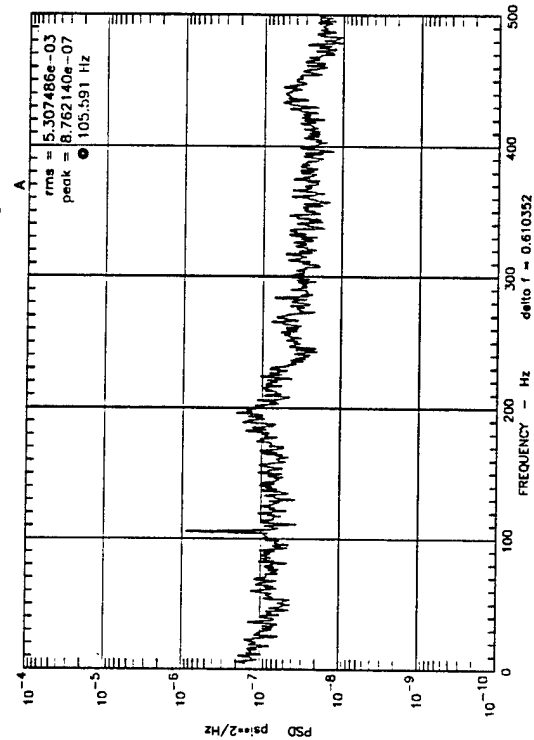
F 15 TPN 3085: q=56 alpha=16 beta=4 bp@n&g



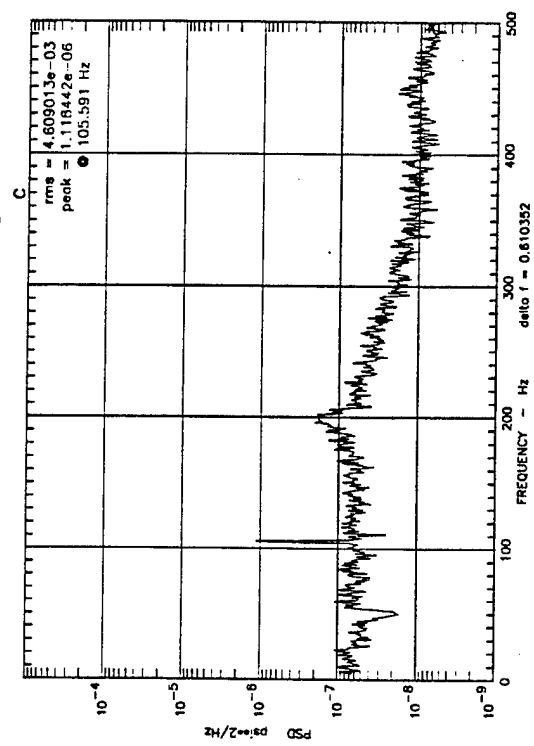
F-15 TPN 3085: q=56 alpha=16 beta=4 bp@n&g



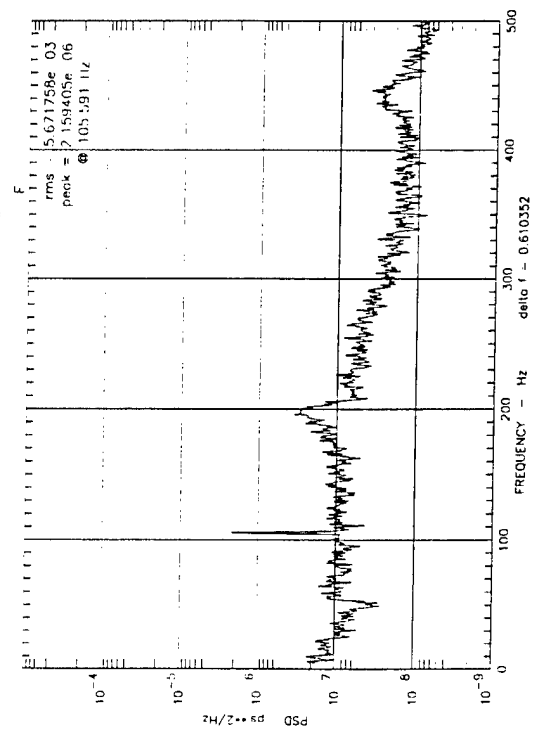
F-15 TPN 3085: q=56 alpha=16 beta=4 bp@n&g



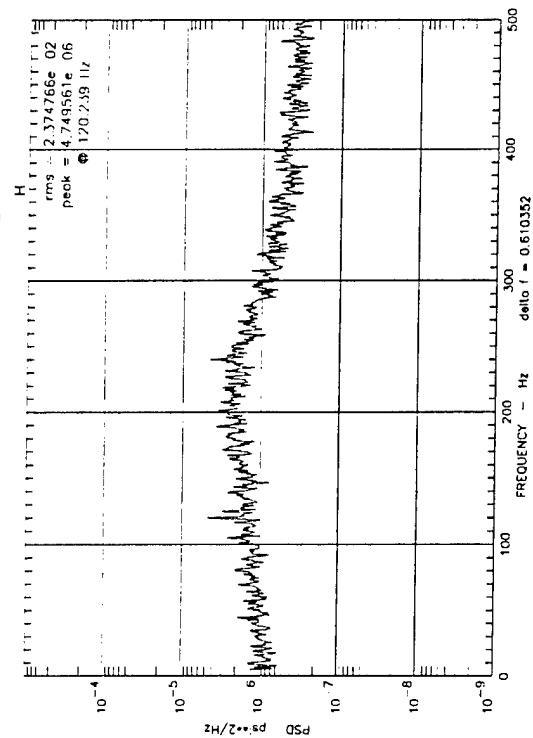
F-15 TPN 3085: q=56 alpha=16 beta=4 bp@n&g



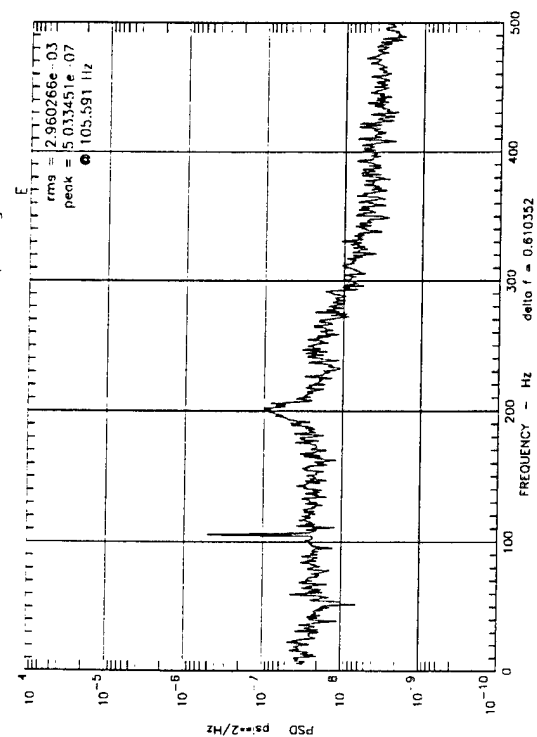
F 15 TPN 3085: q=56 alpha=16 beta=4 bp@n&g



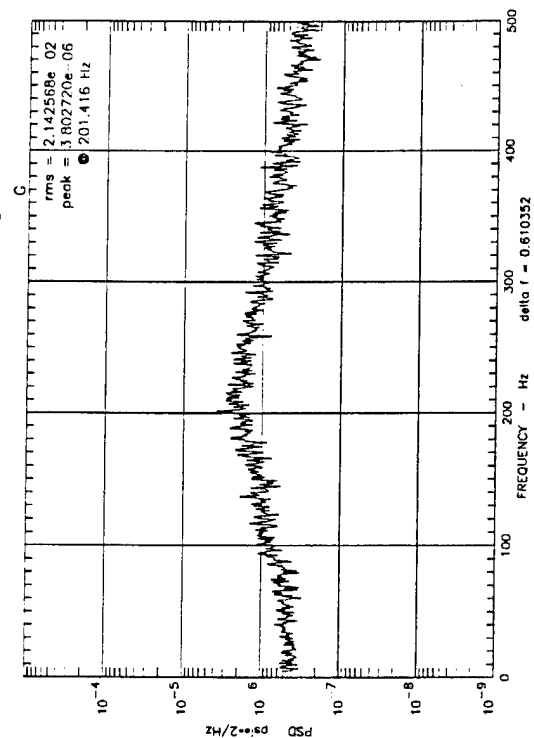
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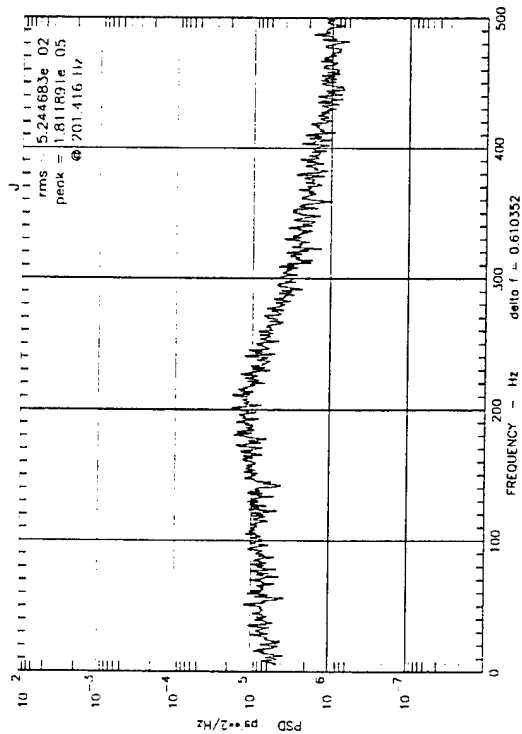
F 15 TPN 3085: q=56 alpha=16 beta=4 bp@n&g



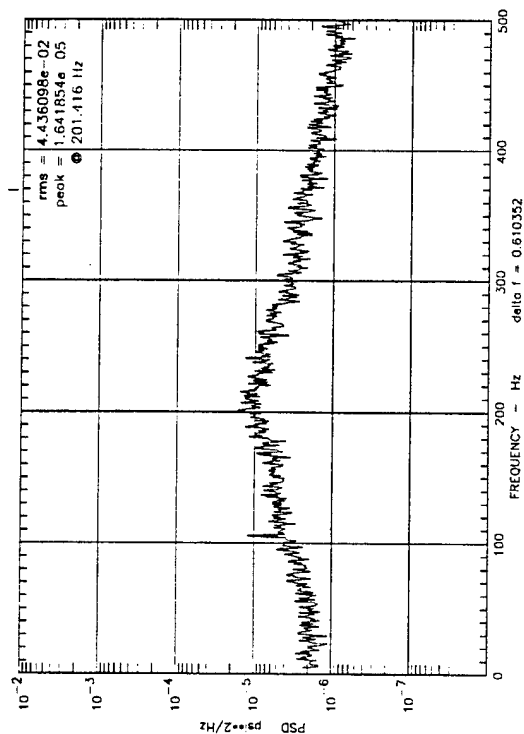
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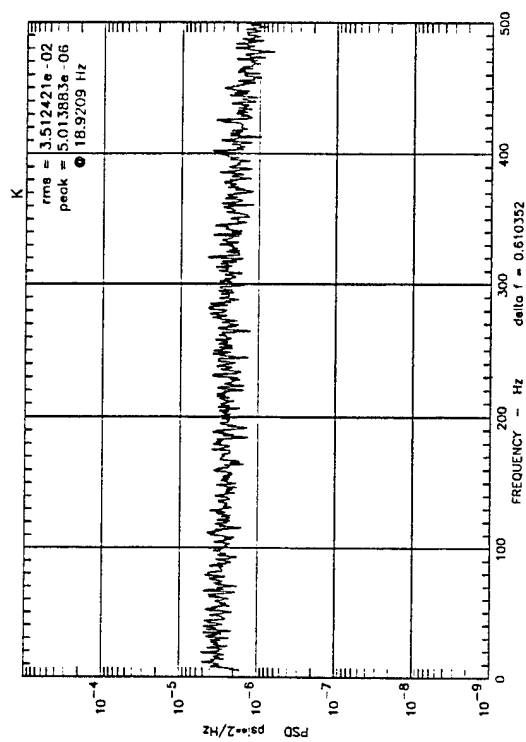
F-15 TPN\_3085: q=56 alpha=16 beta=4 bp@n&g



F-15 TPN\_3085: q=56 alpha=16 beta=4 bp@n&g

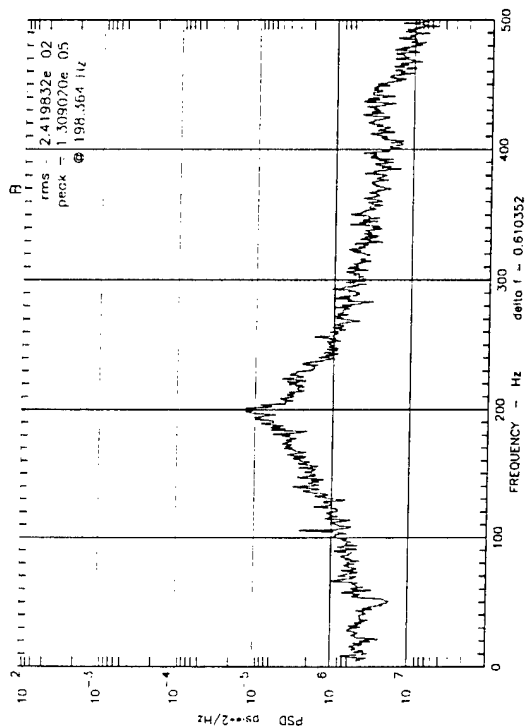


F-15 TPN\_3085: q=56 alpha=16 beta=4 bp@n&g

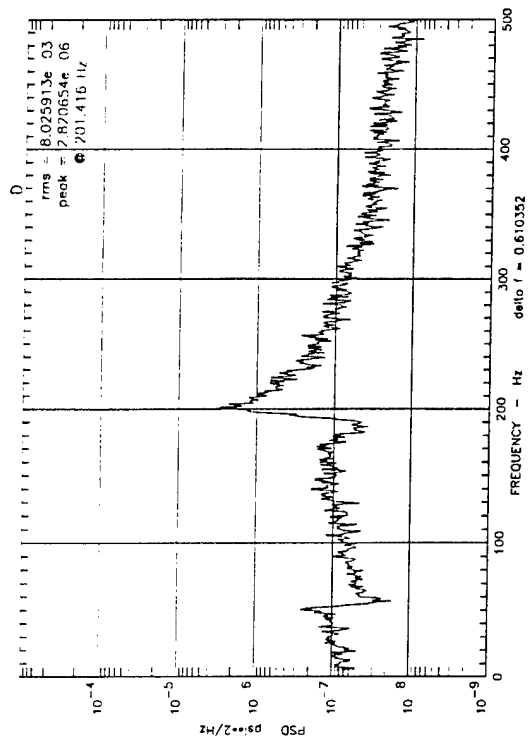




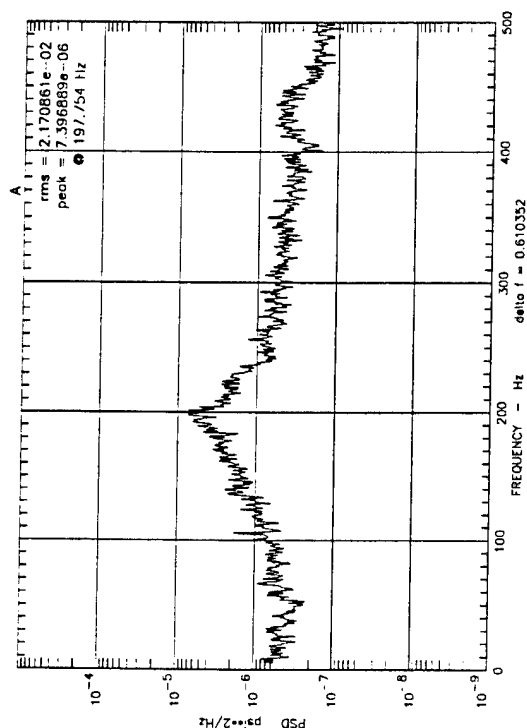
F 15 TPN\_3087: q=56 alpha=20 beta=4 bp@n&g



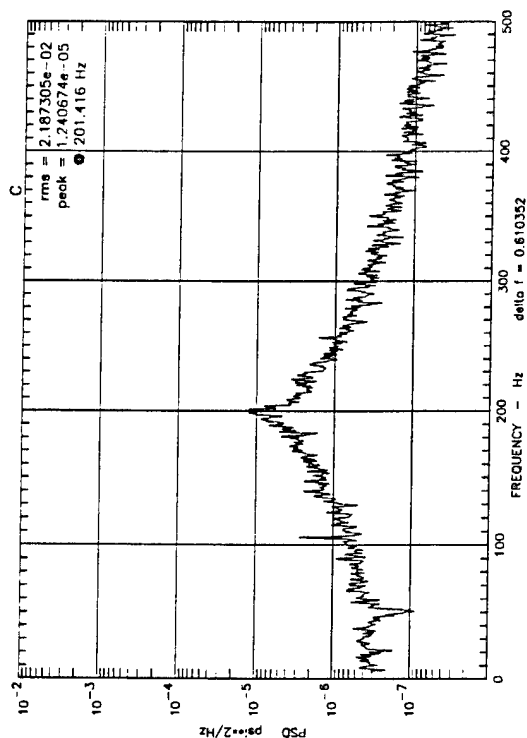
F-15 TPN\_3087: q=56 alpha=20 beta=4 bp@n&g



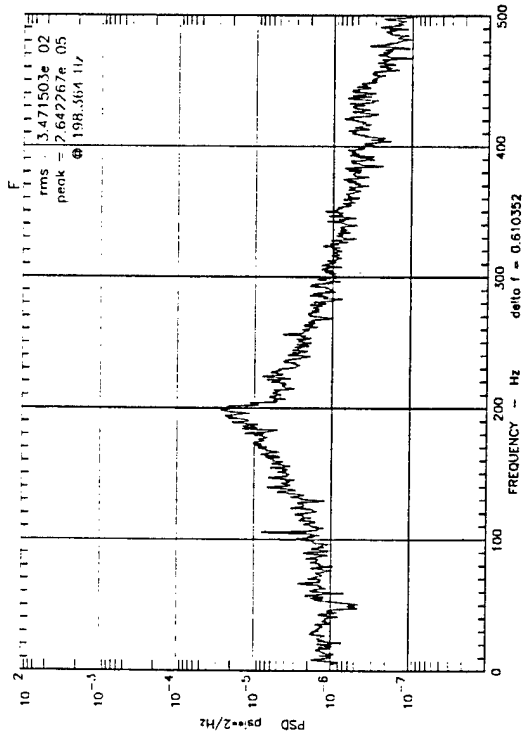
F-15 TPN\_3087: q=56 alpha=20 beta=4 bp@n&g



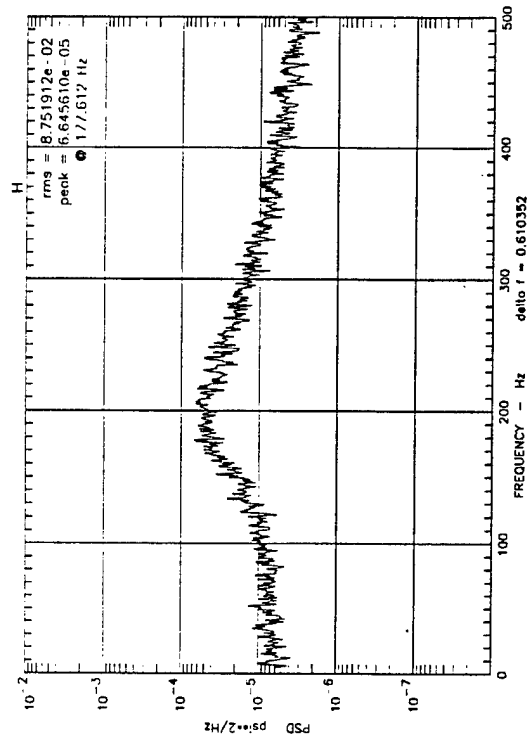
F-15 TPN\_3087: q=56 alpha=20 beta=4 bp@n&g



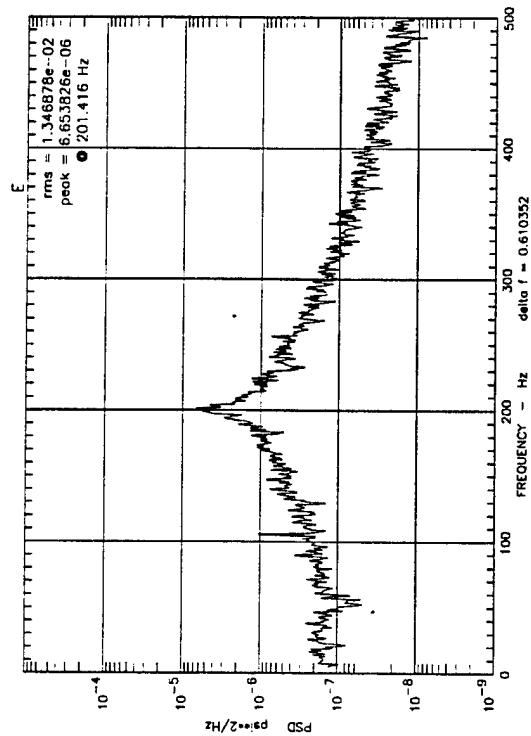
F-15 TPN\_3087: q=56 alpha=20 beta=4 bp@n&g



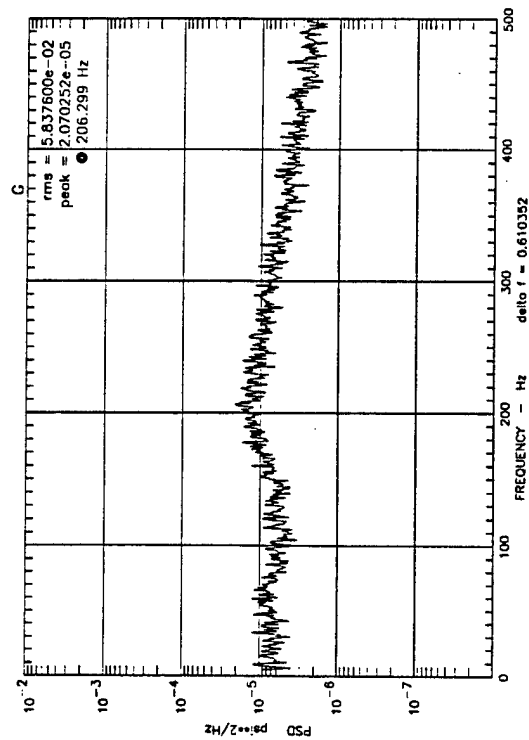
F-15 TPN\_3087: q=56 alpha=20 beta=4 bp@n&g

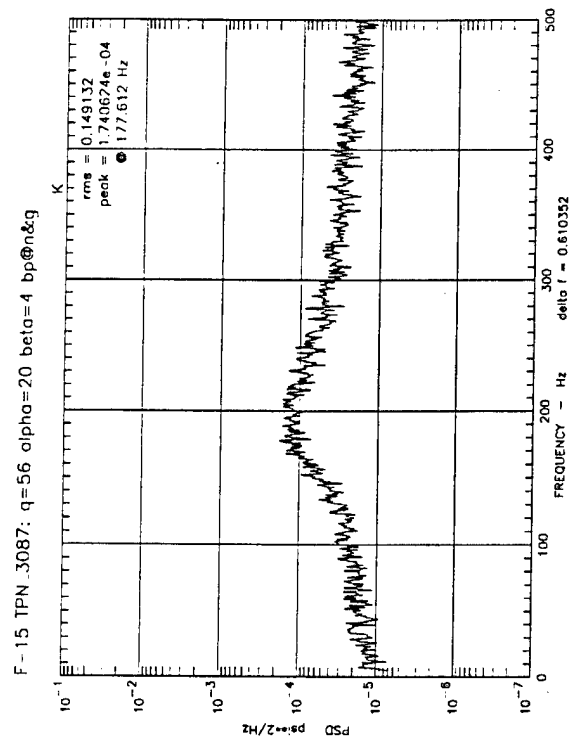
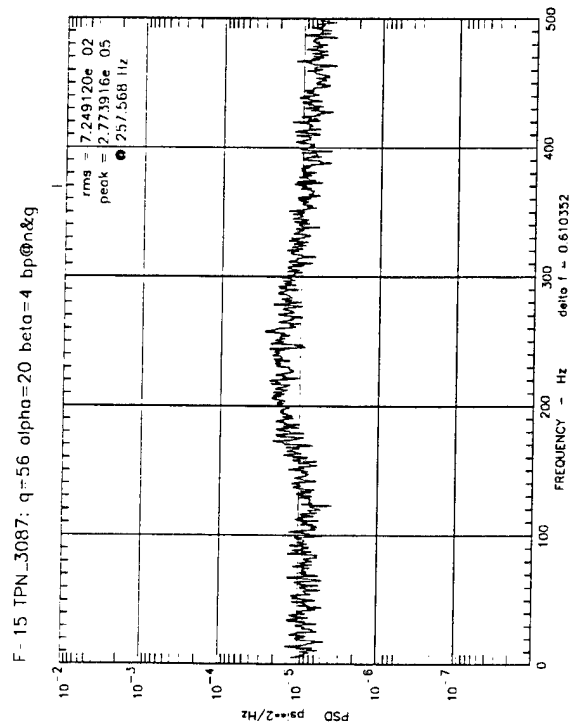
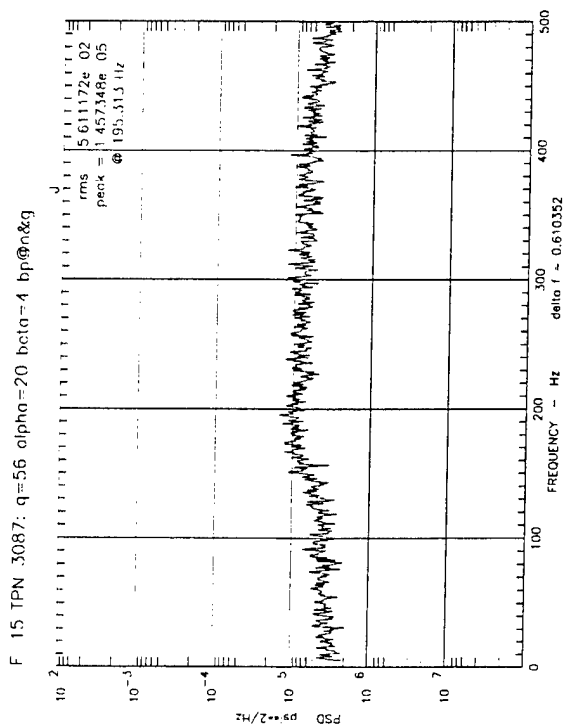


F-15 TPN\_3087: q=56 alpha=20 beta=4 bp@n&g

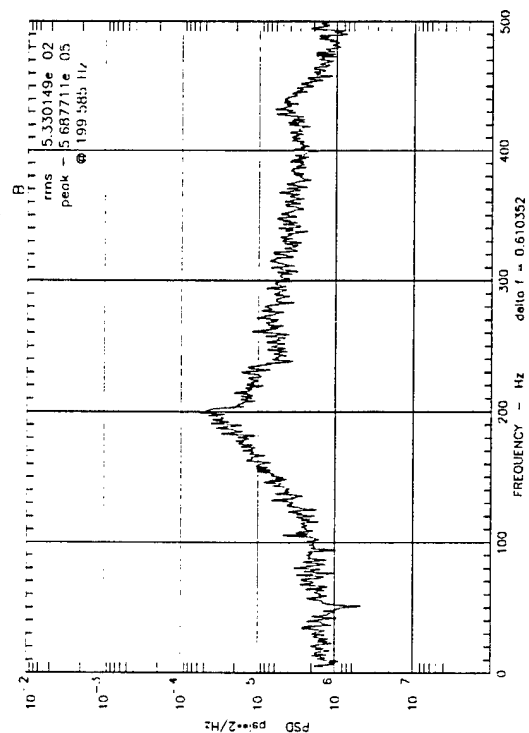


F-15 TPN\_3087: q=56 alpha=20 beta=4 bp@n&g

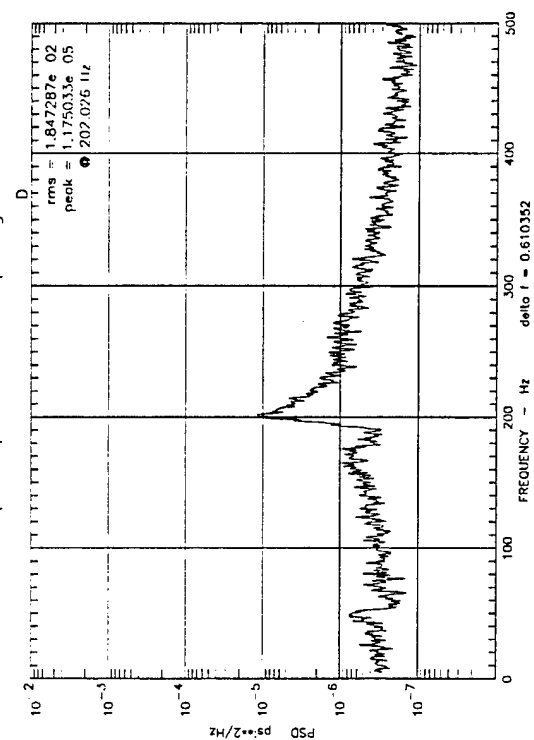




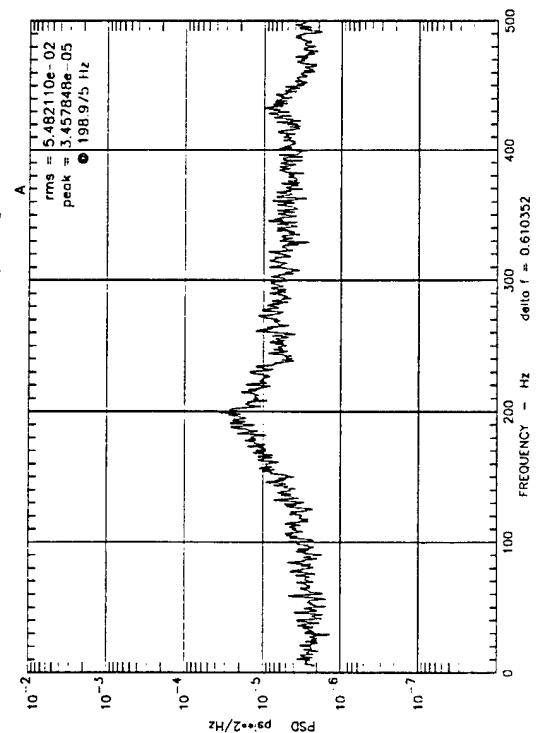
F 15 TPN\_3089: q=56 alpha=24 beta=4 bp@n&g



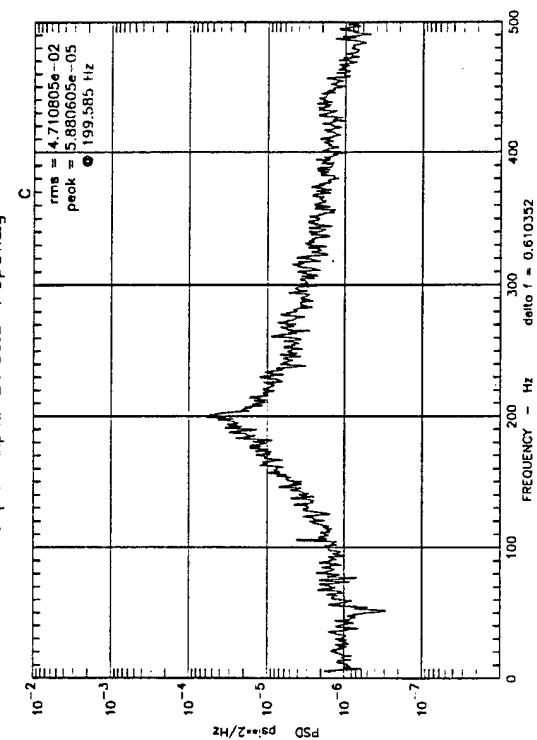
F 15 TPN\_3089: q=56 alpha=24 beta=4 bp@n&g



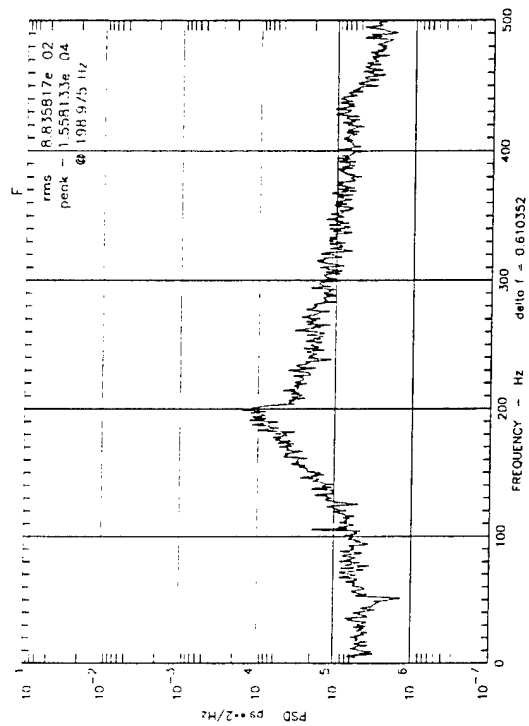
F-15 TPN\_3089: q=56 alpha=24 beta=4 bp@n&g



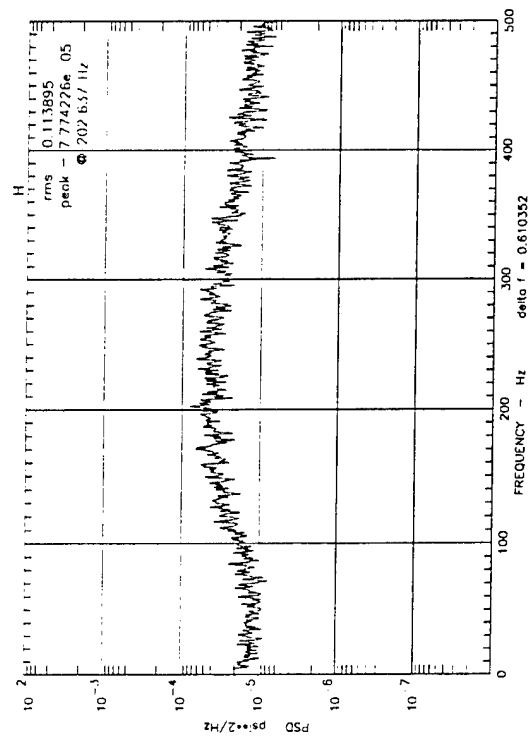
F-15 TPN\_3089: q=56 alpha=24 beta=4 bp@n&g



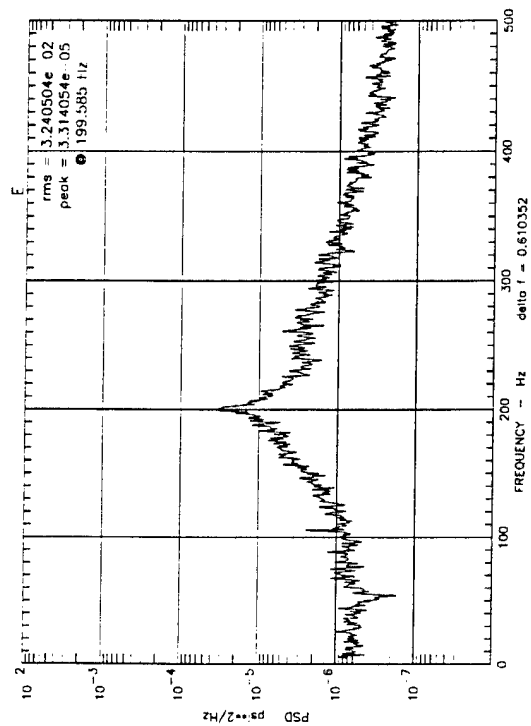
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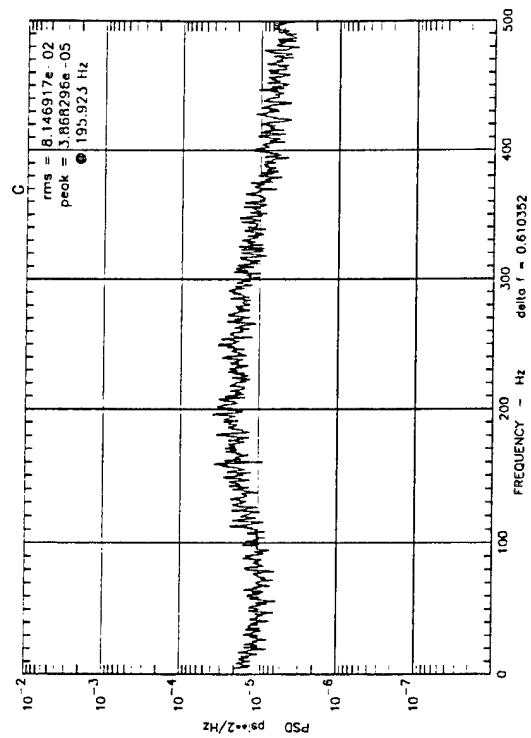
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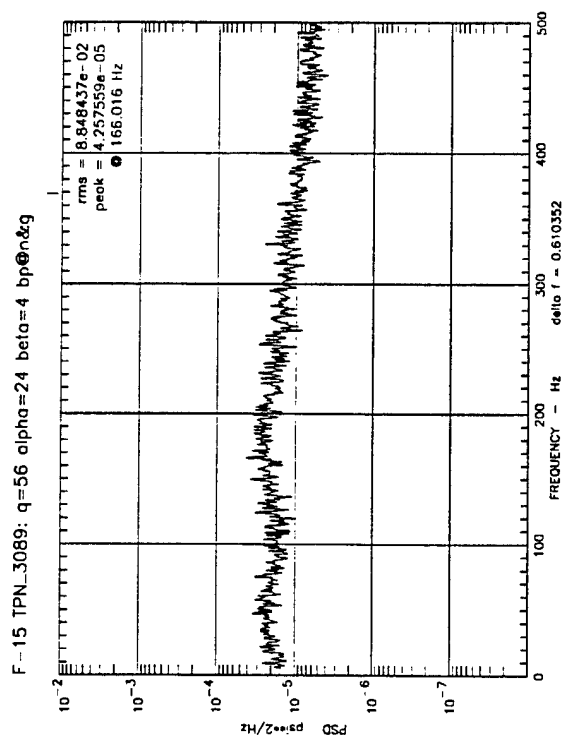
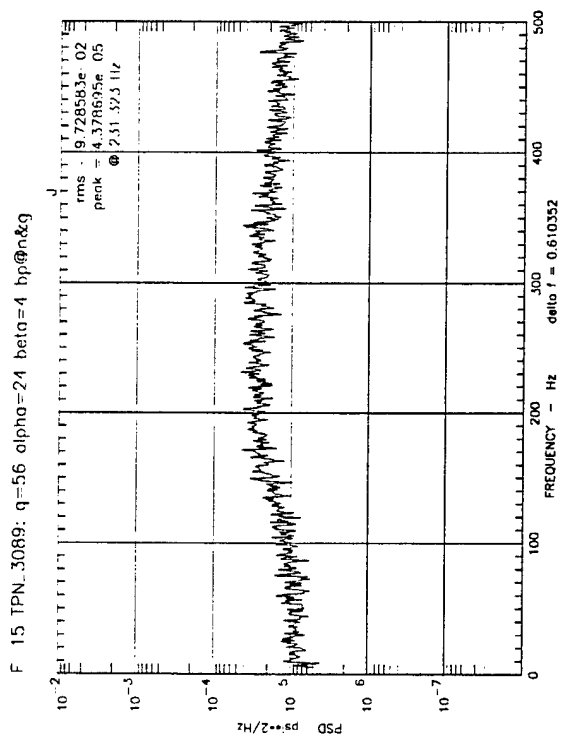


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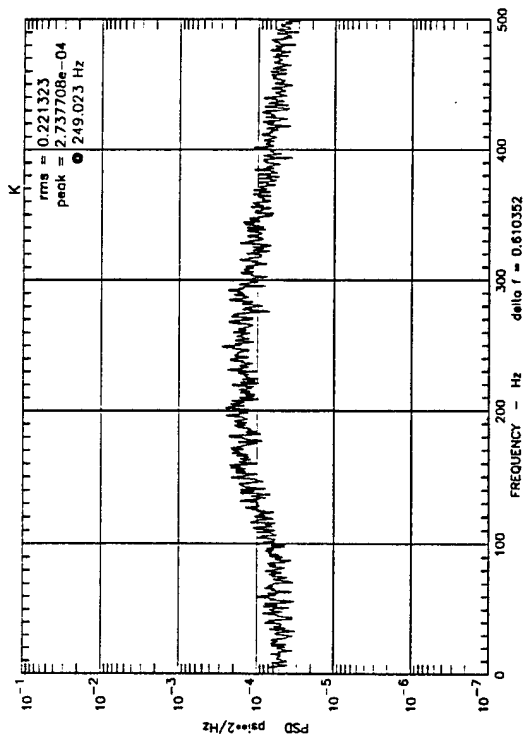


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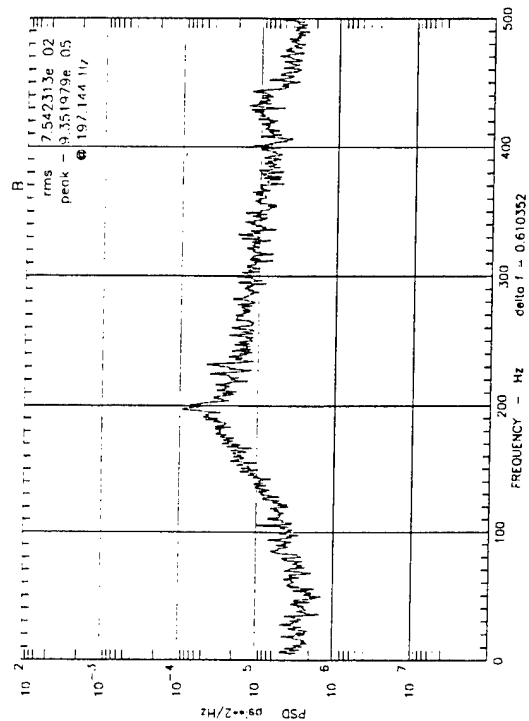




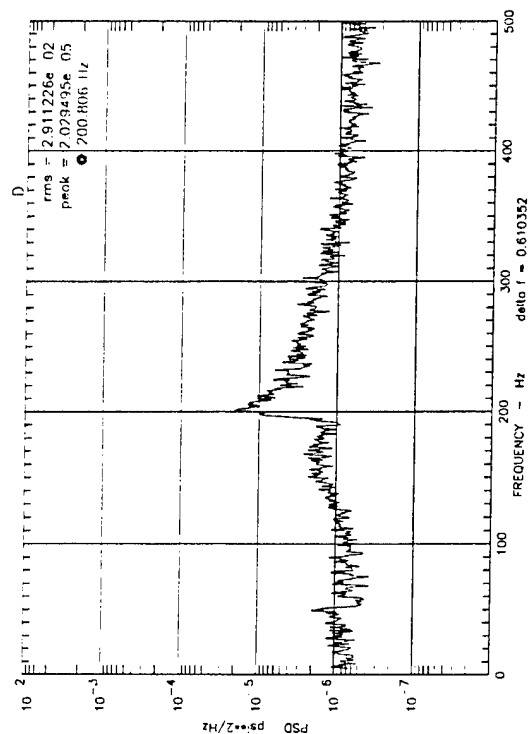
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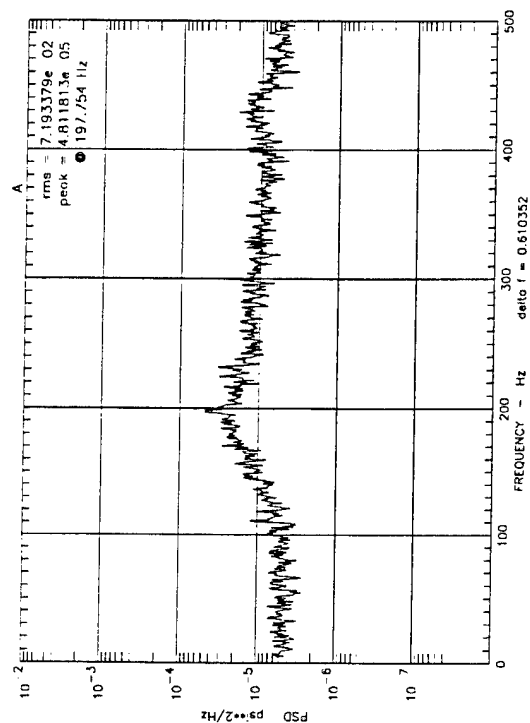
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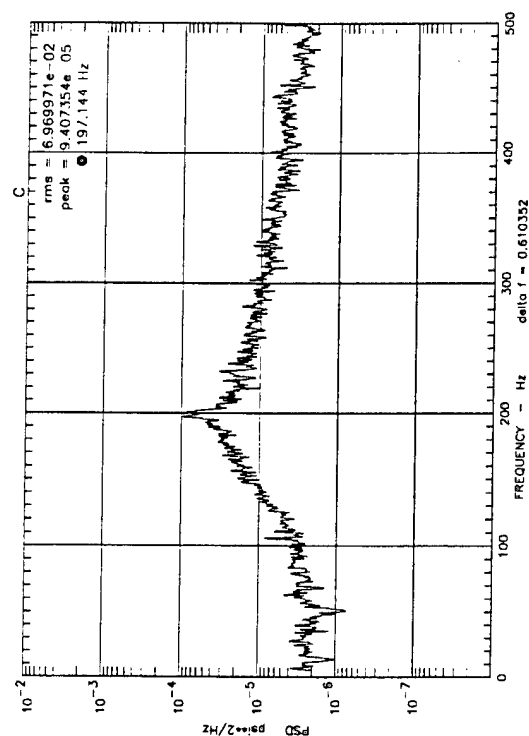
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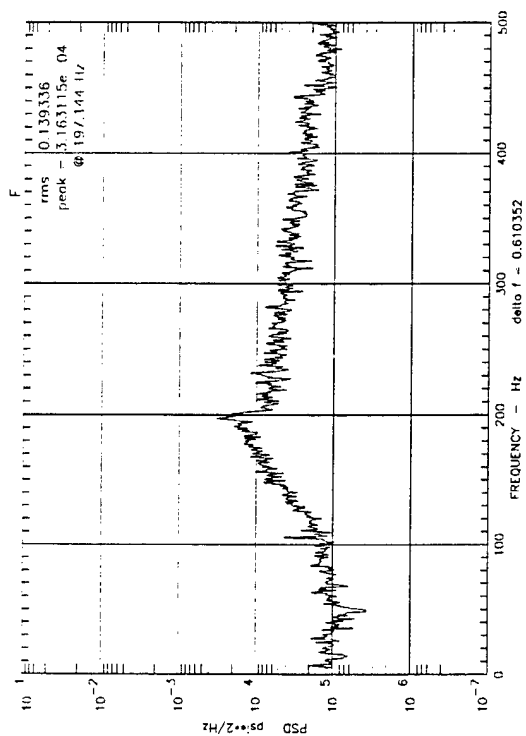
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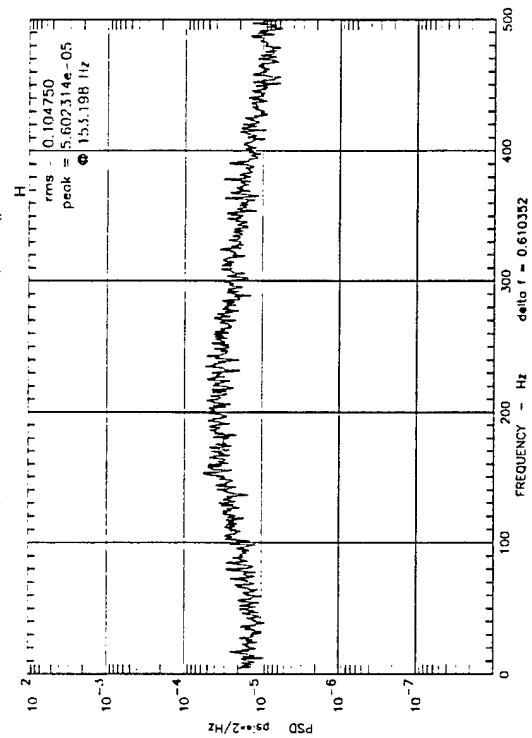
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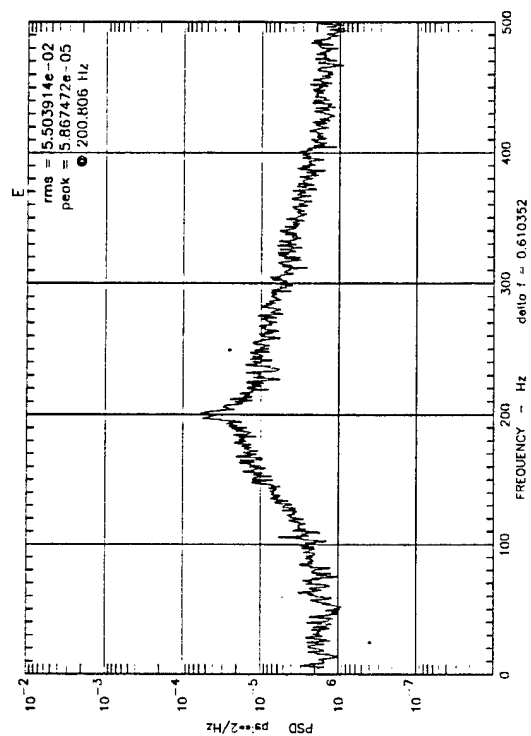
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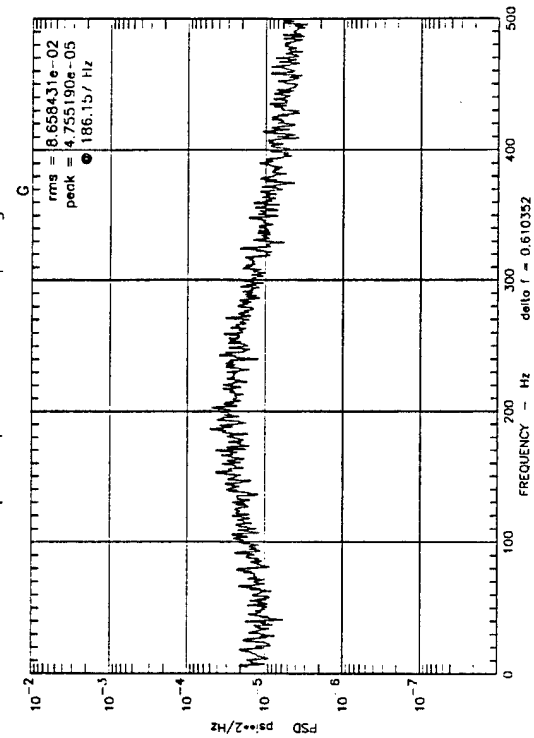
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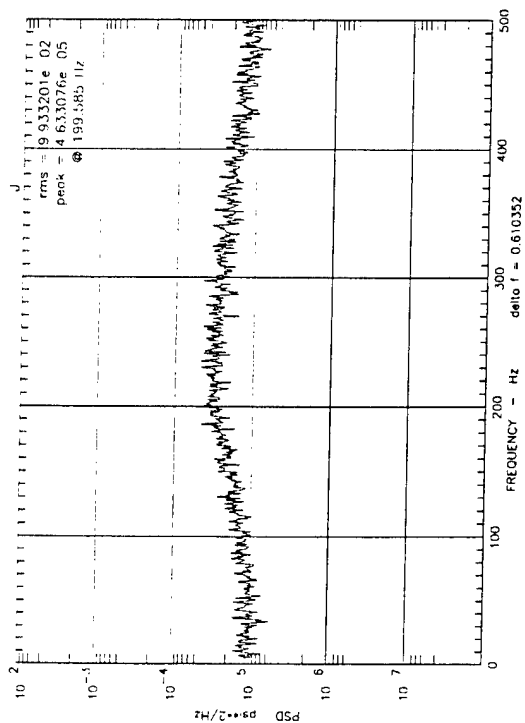


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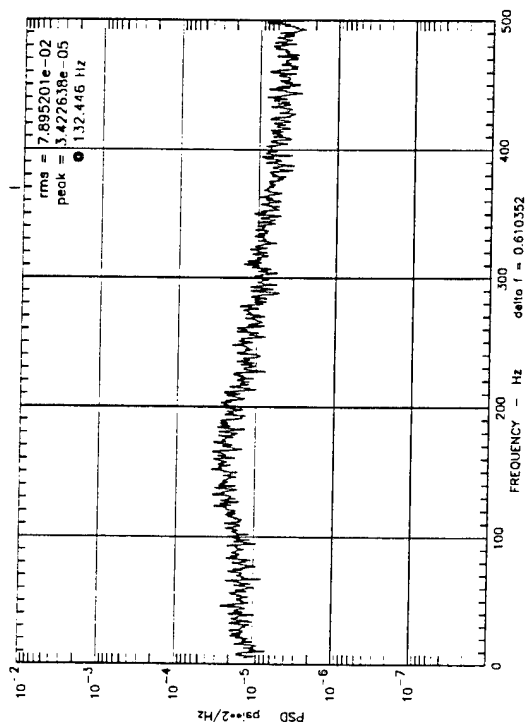




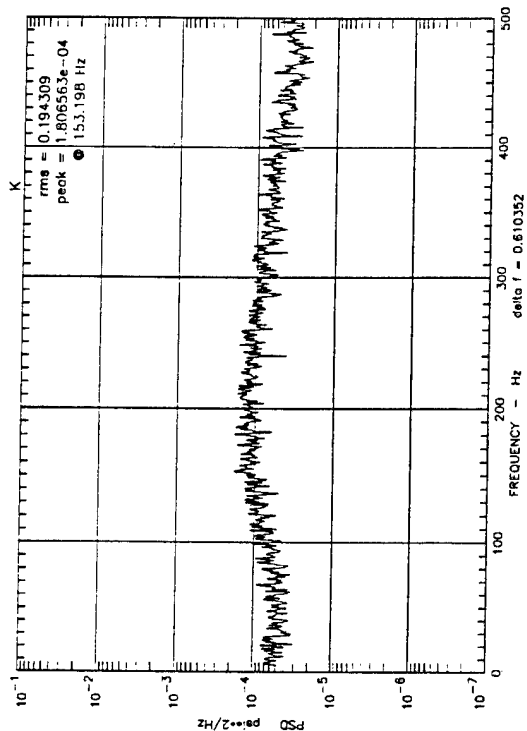
F-15 TPN .3090: q=56 alpha=26 beta=4 bp@n&q



F-15 TPN .3090: q=56 alpha=26 beta=4 bp@n&q



F-15 TPN .3090: q=56 alpha=26 beta=4 bp@n&q

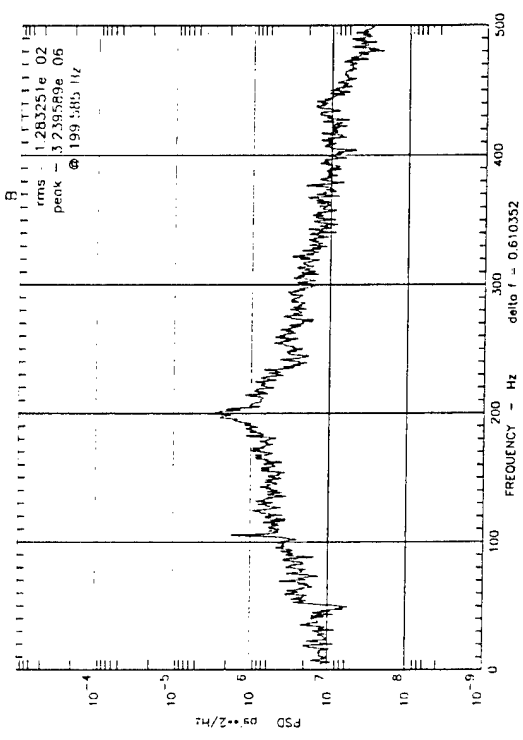


**PRESSURE PSD's**

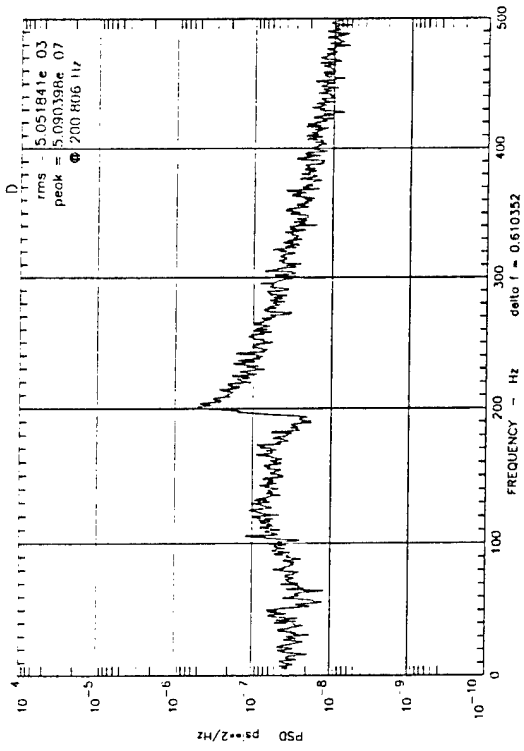
**Q=56 PSF**

**2.1.2.6 PSD GRAPHS( 5- 500 Hz), NBP = 87 PSI, WBP = 65 PSI, Beta = 0, +4, -4  
Deg, Alpha = 8...32 Deg**

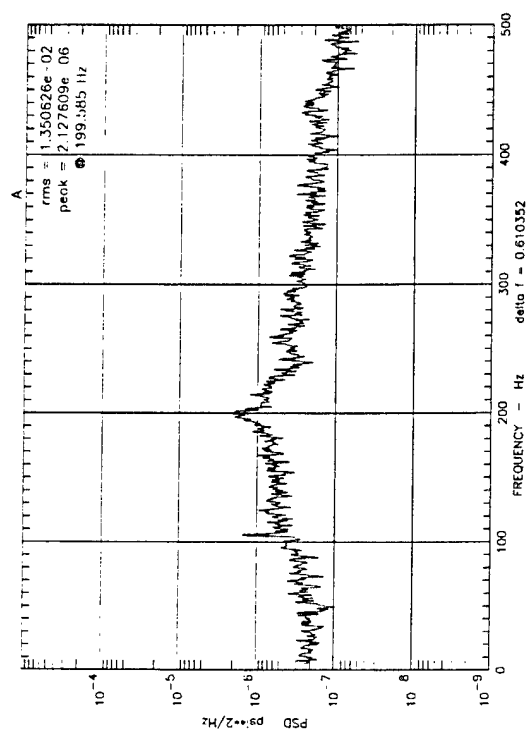
F 15 TPN 3094: q=56 alpha=16 beta=-4 bp@n&w



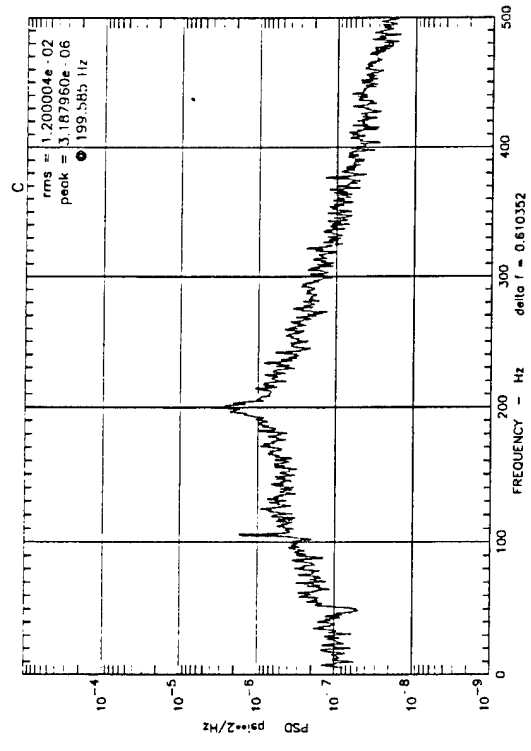
F -15 TPN 3094: q=56 alpha=16 beta=-4 bp@n&w



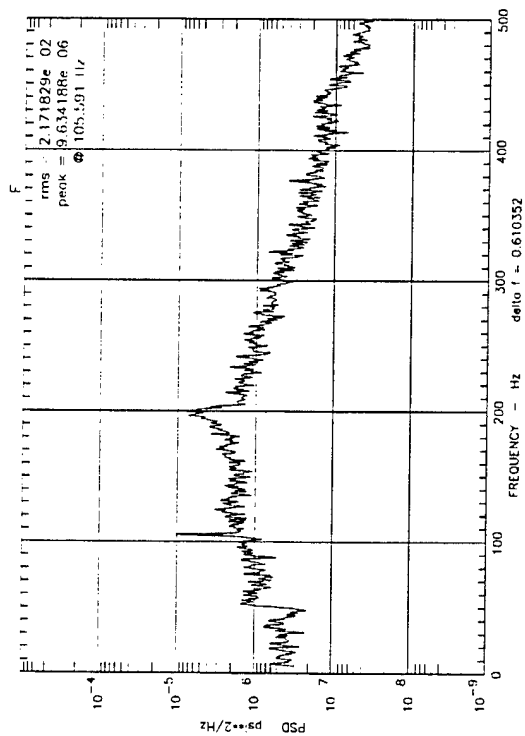
F 15 TPN 3094: q=56 alpha=16 beta=-4 bp@n&w



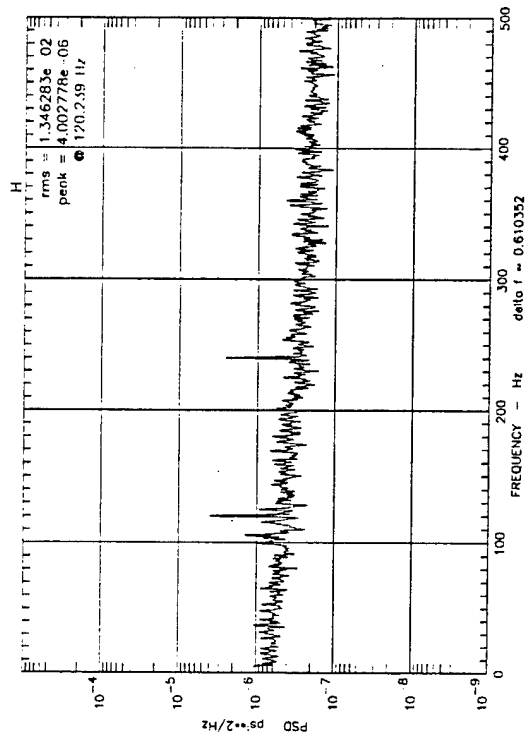
F -15 TPN 3094: q=56 alpha=16 beta=-4 bp@n&w



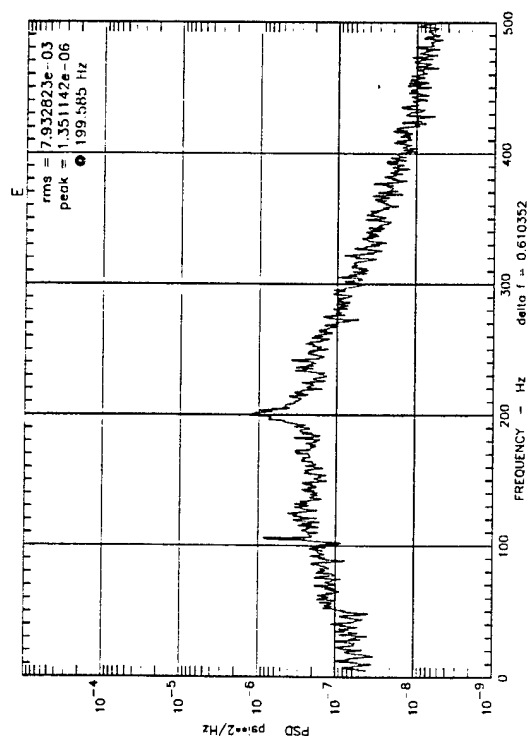
F 15 TPN\_3094: q=56 alpha=16 beta=-4 bp@n&w



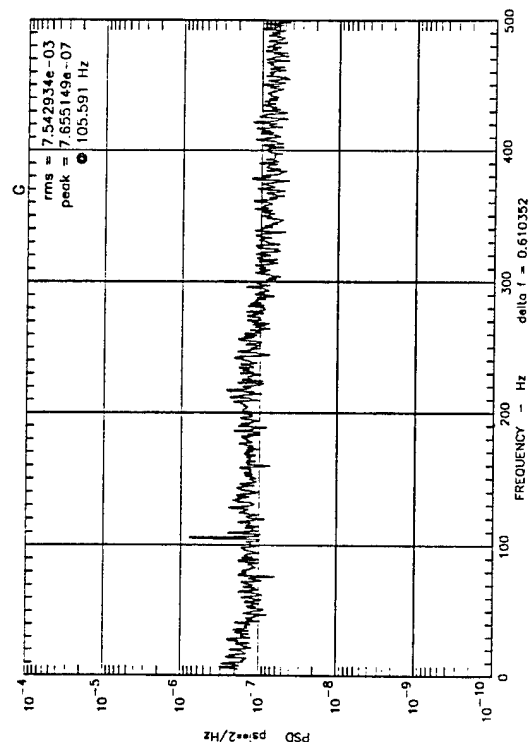
F 15 TPN\_3094: q=56 alpha=16 beta=-4 bp@n&w



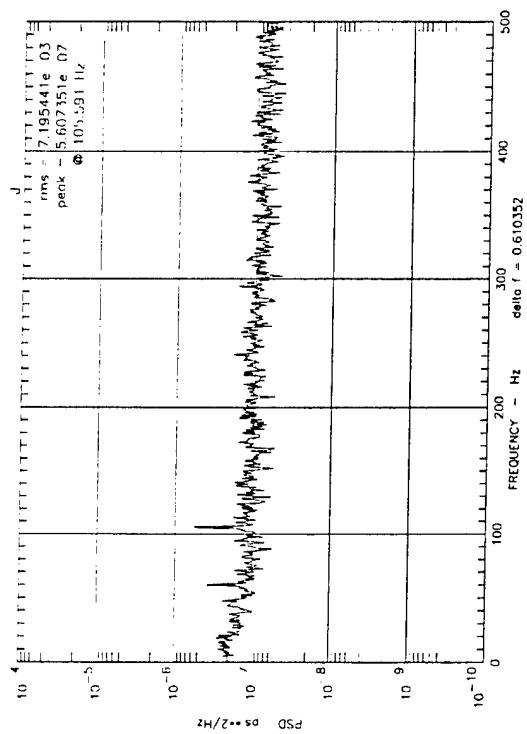
F 15 TPN\_3094: q=56 alpha=16 beta=-4 bp@n&w



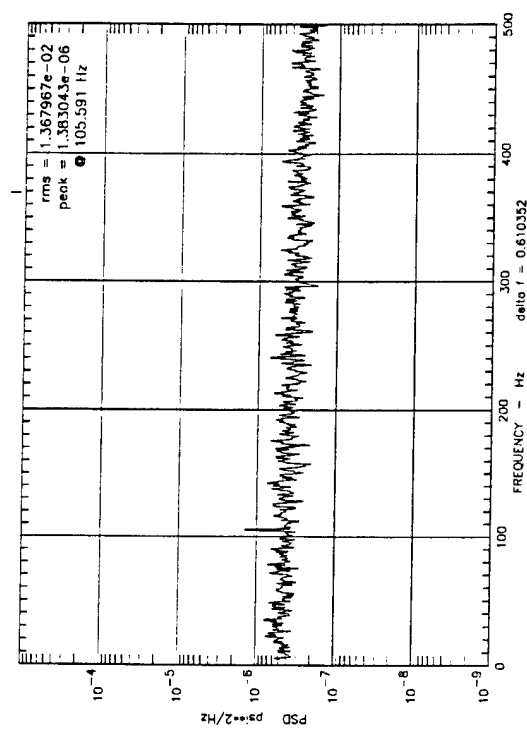
F 15 TPN\_3094: q=56 alpha=16 beta=-4 bp@n&w



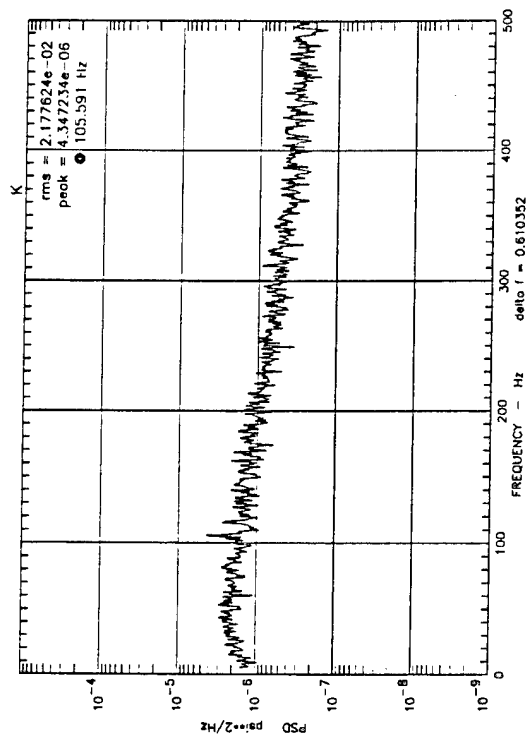
F-15 TPN\_3094: q=56 alpha=16 beta=-4 bp@n&w

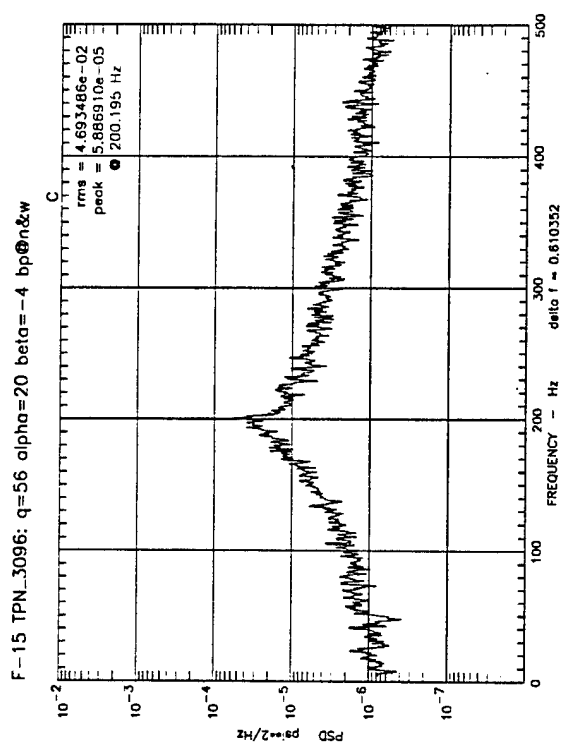
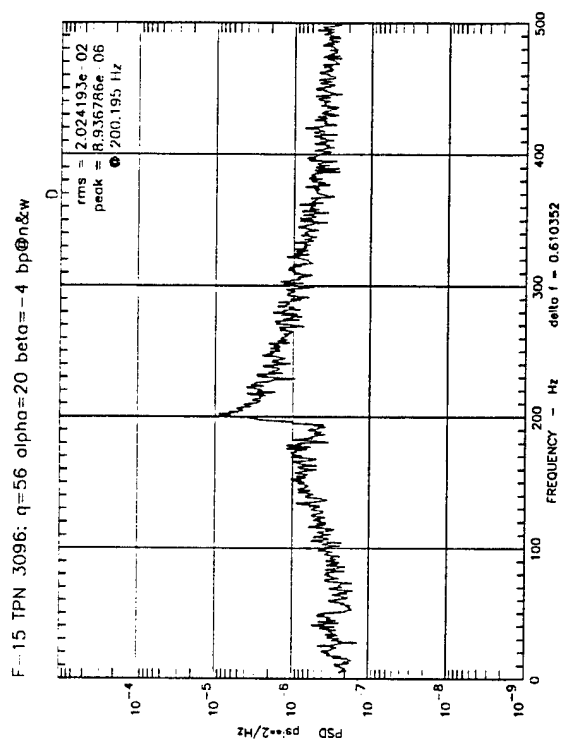
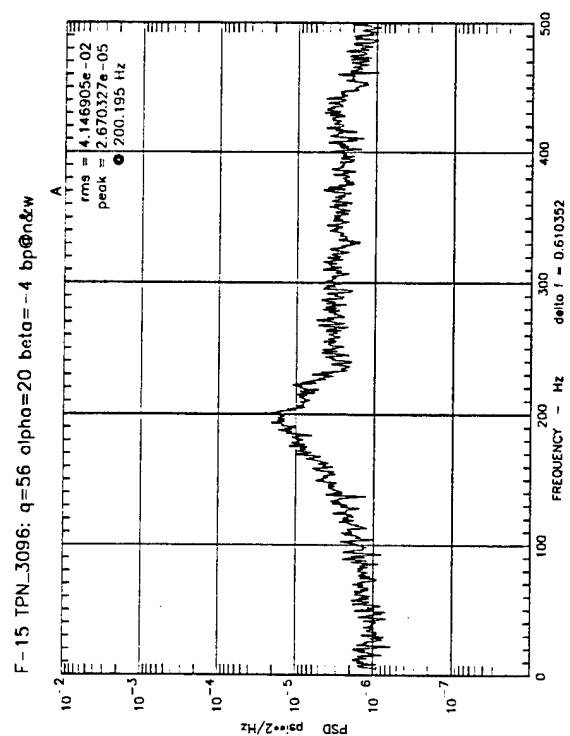
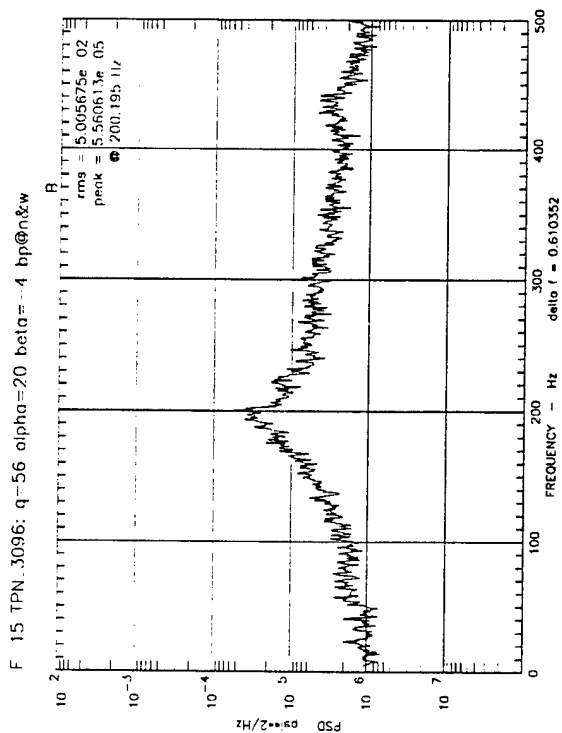


F-15 TPN\_3094: q=56 alpha=16 beta=-4 bp@n&w

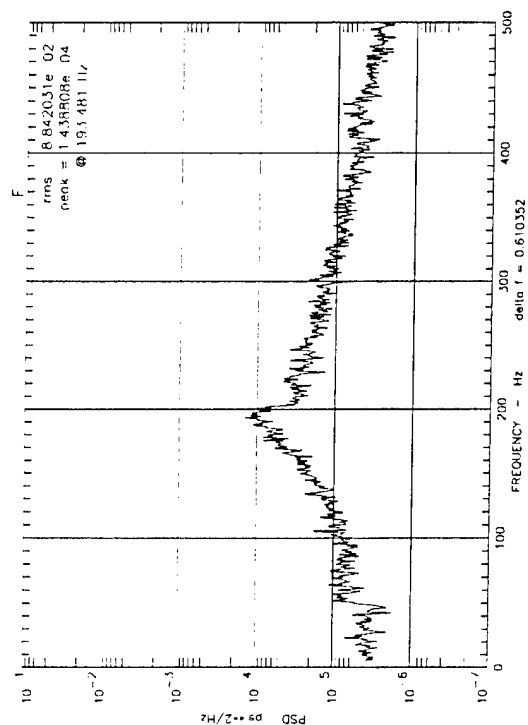


F-15 TPN\_3094: q=56 alpha=16 beta=-4 bp@n&w

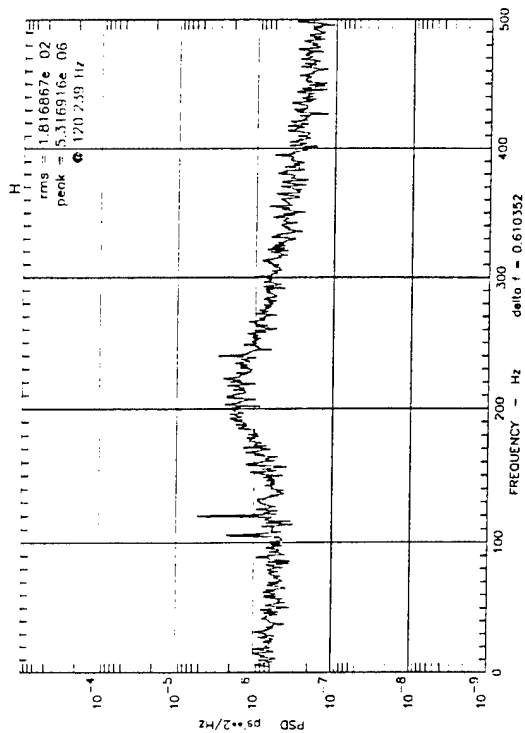




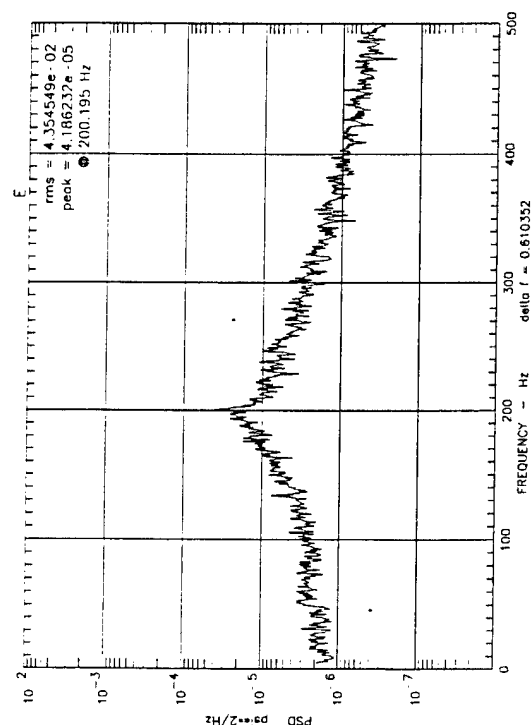
F 15 TPN 3096: q=56 alpha=20 beta=-4 bp@n&w



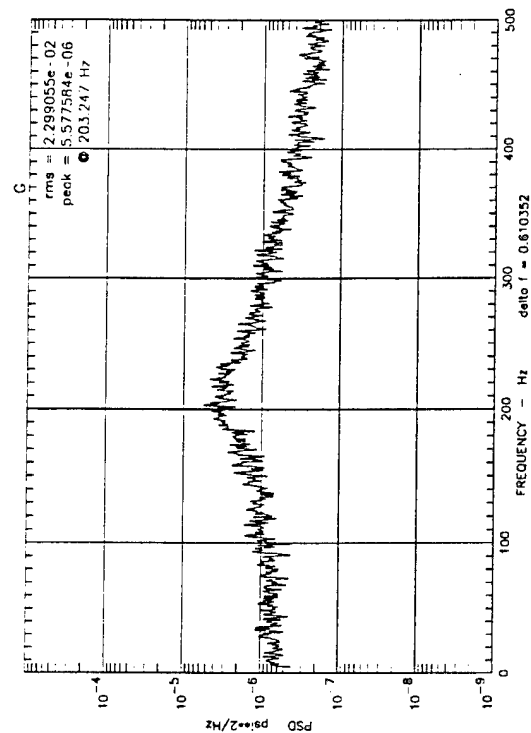
F 15 TPN 3096: q=56 alpha=20 beta=-4 bp@n&w



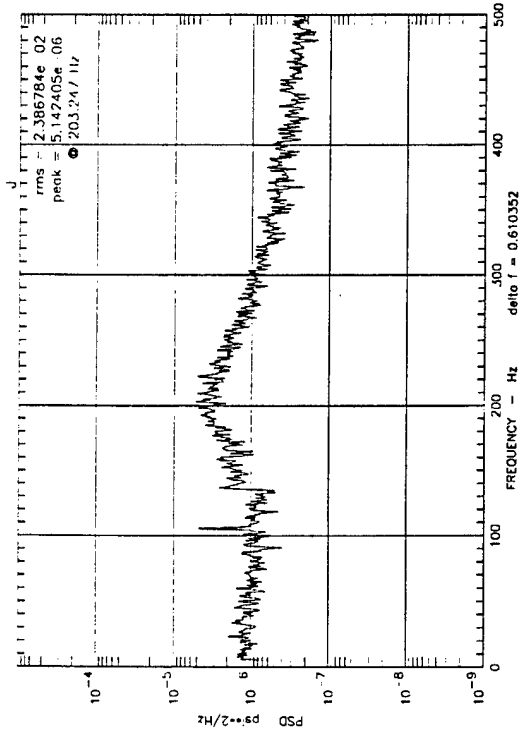
F 15 TPN 3096: q=56 alpha=20 beta=-4 bp@n&w



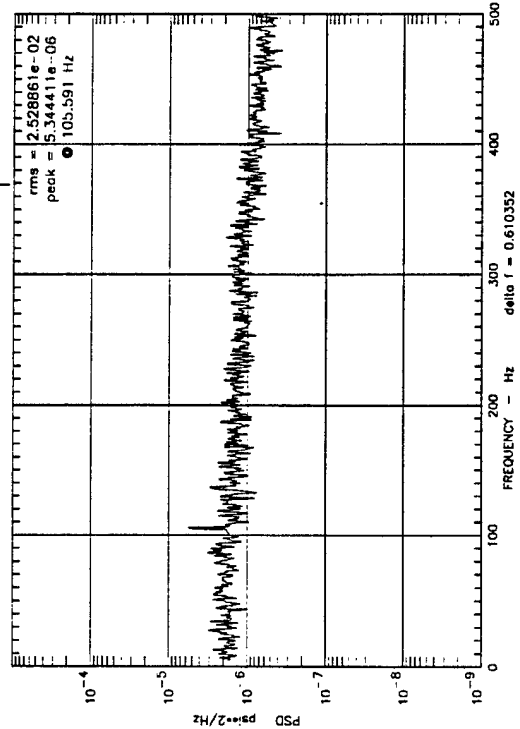
F 15 TPN 3096: q=56 alpha=20 beta=-4 bp@n&w



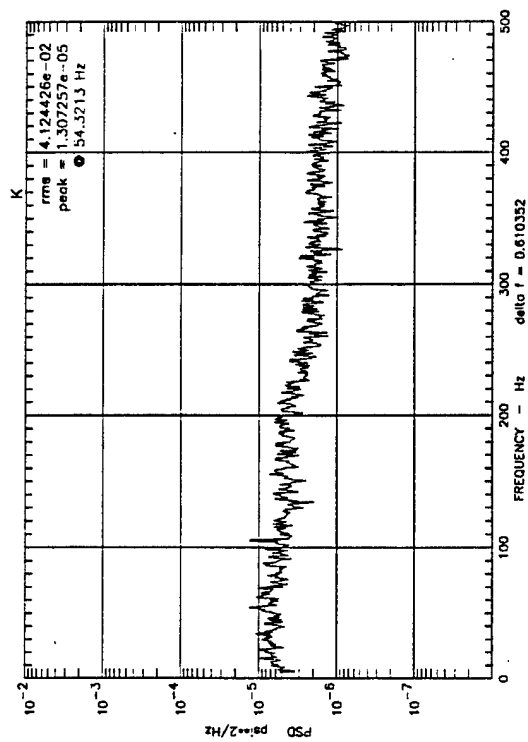
F-15 TPN\_3096: q=56 alpha=20 beta=-4 bp@n&w



F-15 TPN\_3096: q=56 alpha=20 beta=-4 bp@n&w

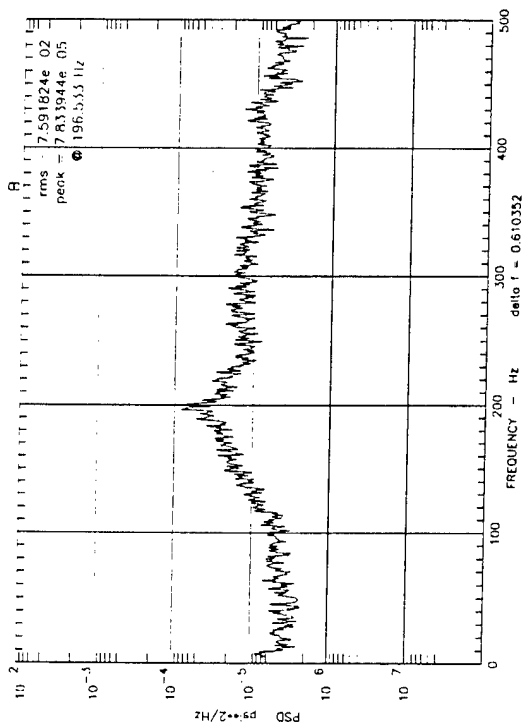


F-15 TPN\_3096: q=56 alpha=20 beta=-4 bp@n&w

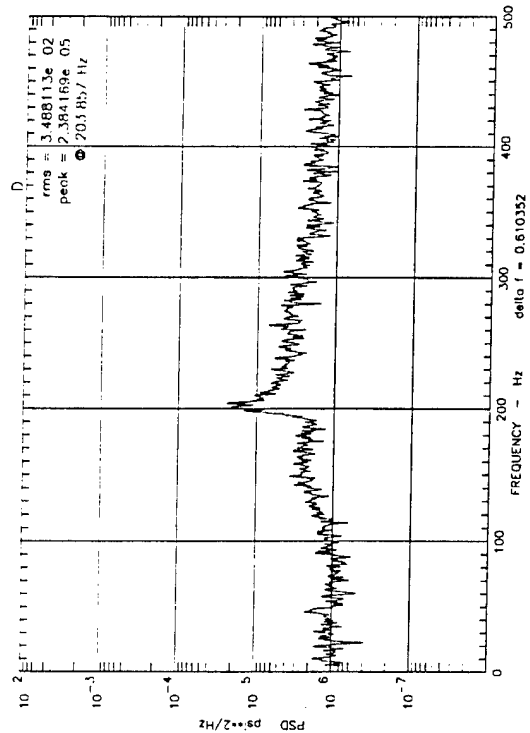




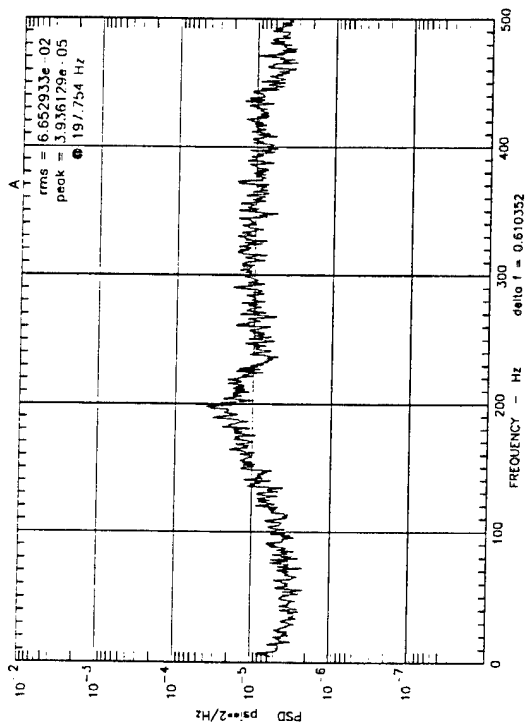
F 15 TPN 3098: q=56 alpha=24 beta=-4 bp@n&w



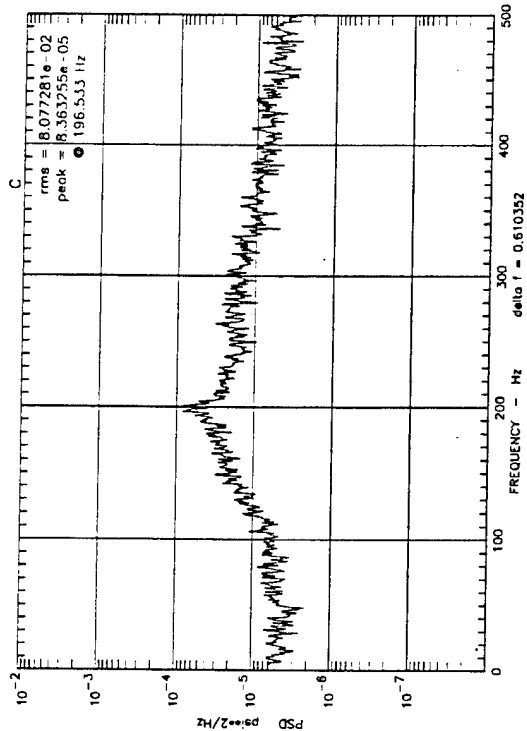
F 15 TPN 3098: q=56 alpha=24 beta=-4 bp@n&w



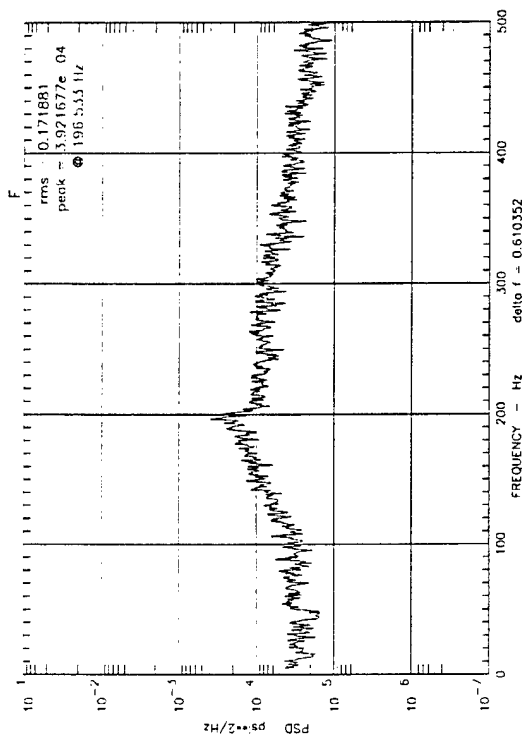
F 15 TPN 3098: q=56 alpha=24 beta=-4 bp@n&w



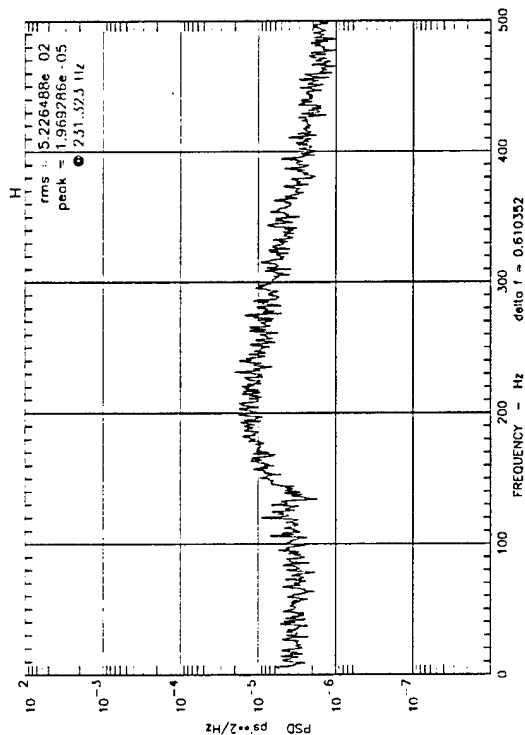
F 15 TPN 3098: q=56 alpha=24 beta=-4 bp@n&w



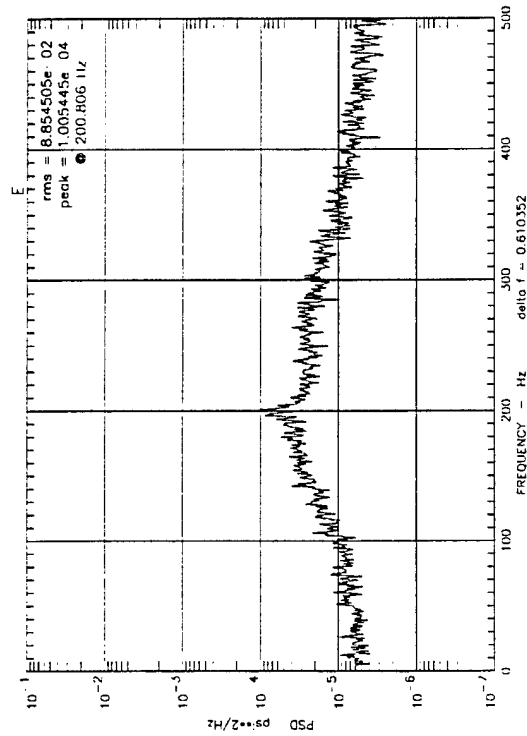
F 15 TPN 3098: q=56 alpha=24 beta=-4 bp@n&w



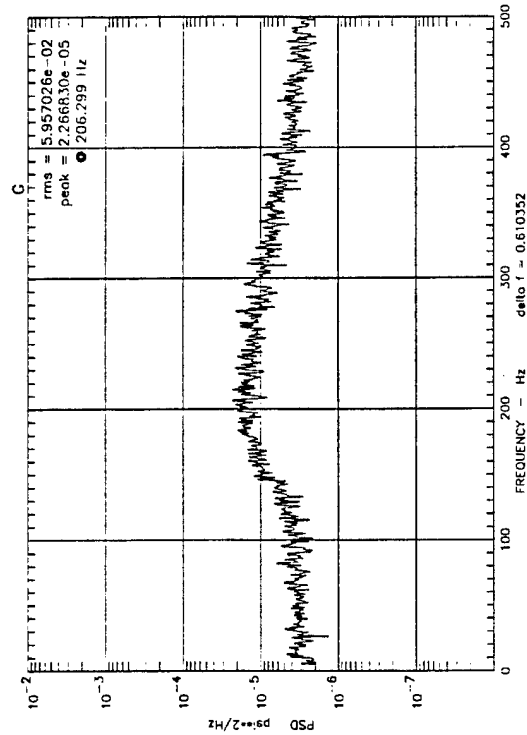
F 15 TPN 3098: q=56 alpha=24 beta=-4 bp@n&w



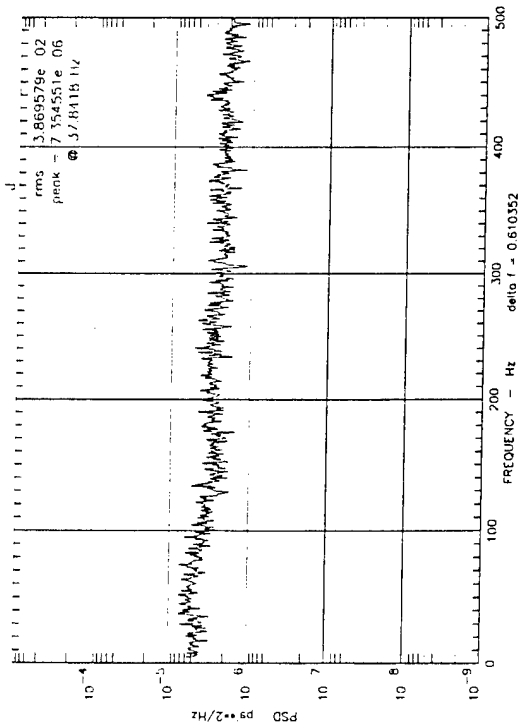
F 15 TPN 3098: q=56 alpha=24 beta=-4 bp@n&w



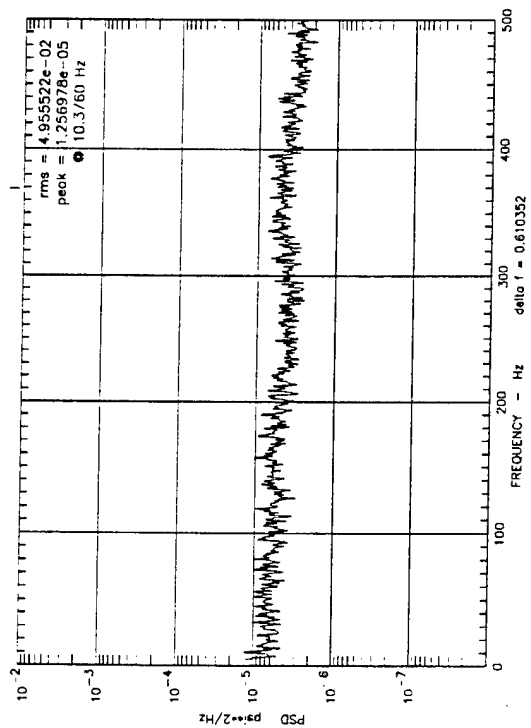
F 15 TPN 3098: q=56 alpha=24 beta=-4 bp@n&w



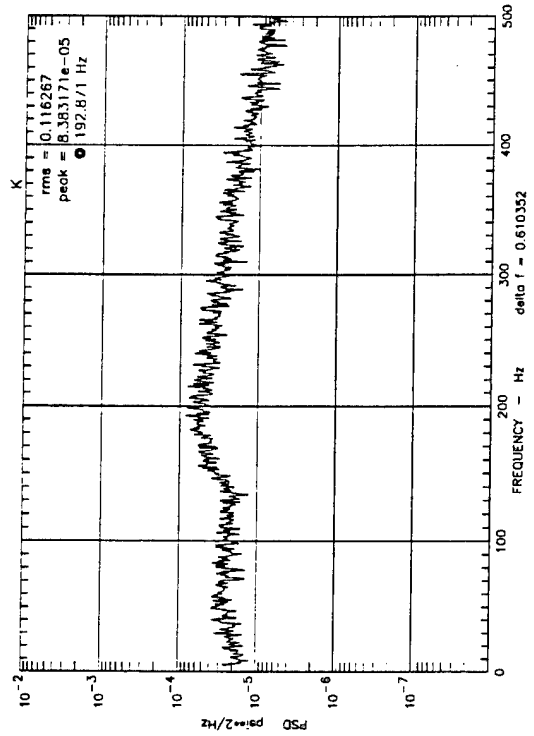
F-15 TPN\_3098: q=56 alpha=24 beta=-4 bp@n&w



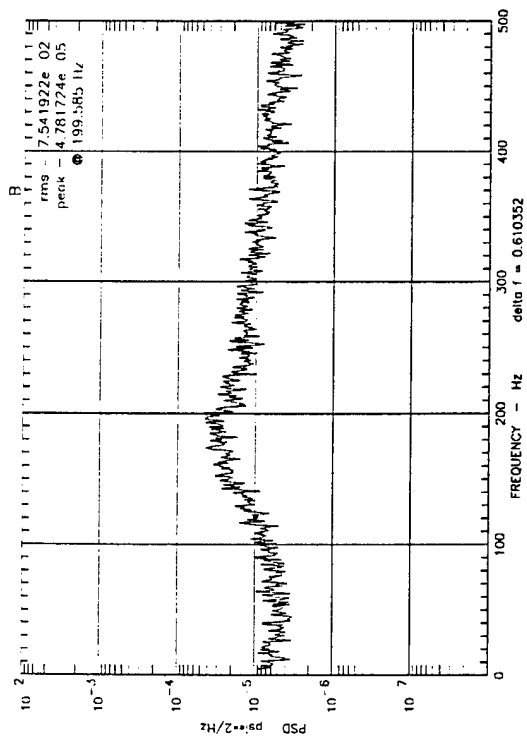
F-15 TPN\_3098: q=56 alpha=24 beta=-4 bp@n&w



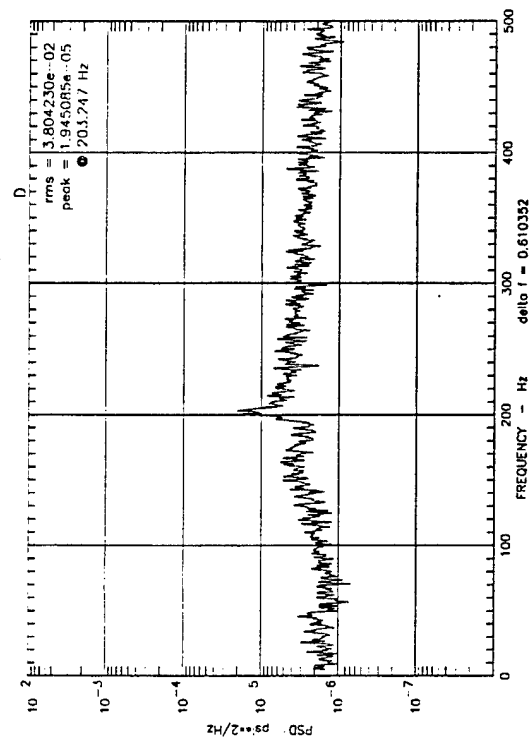
F-15 TPN\_3098: q=56 alpha=24 beta=-4 bp@n&w



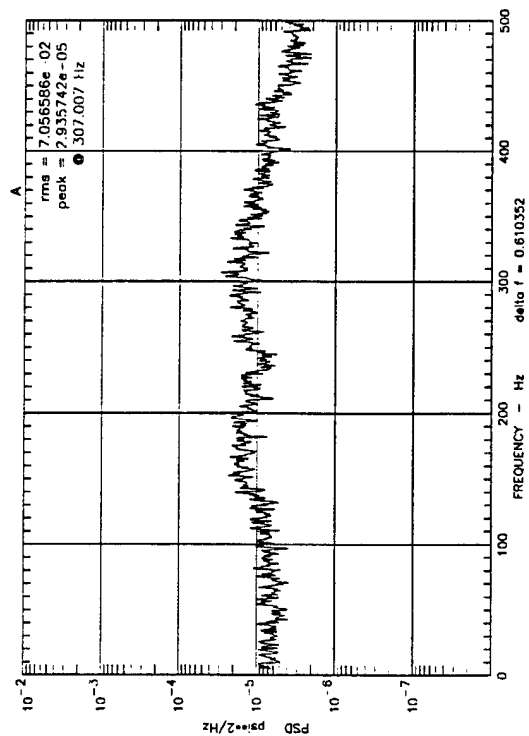
F 15 TPN 3099: q=56 alpha=26 beta=-4 bp@n&w



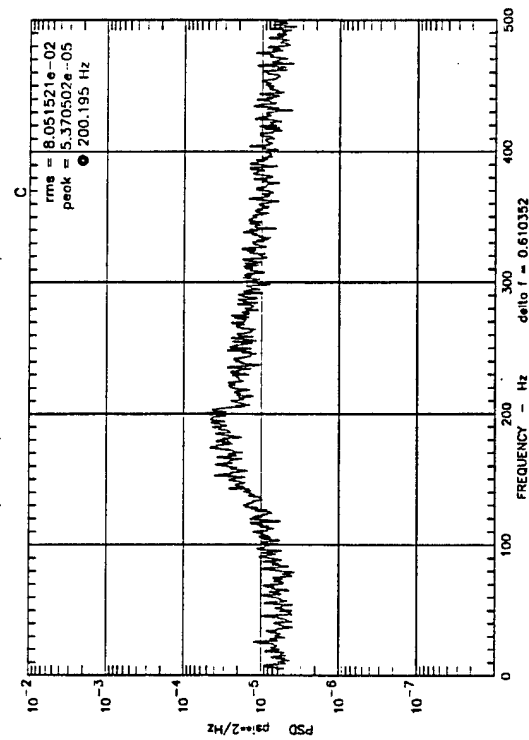
F 15 TPN 3099: q=56 alpha=26 beta=-4 bp@n&w



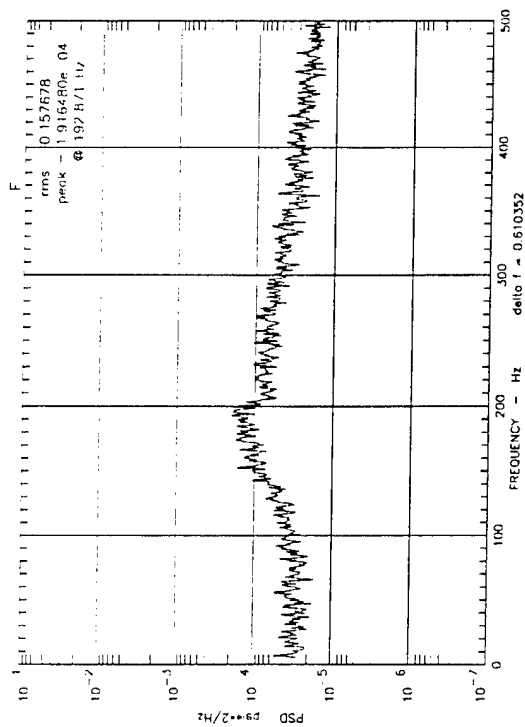
F-15 TPN 3099: q=56 alpha=26 beta=-4 bp@n&w



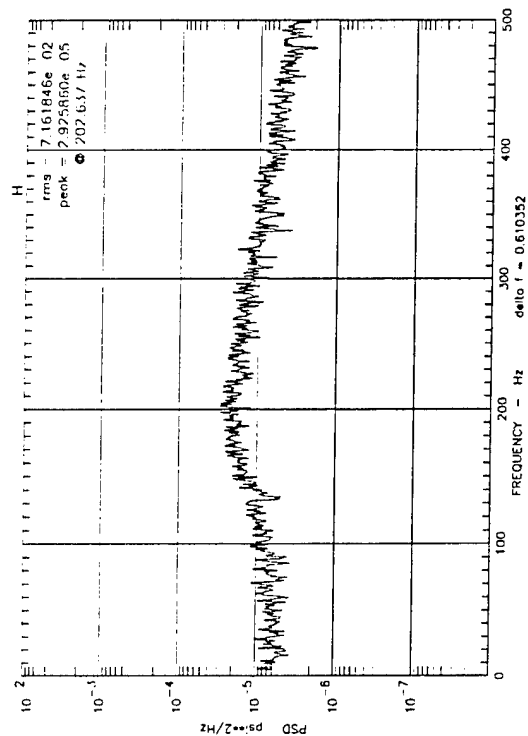
F-15 TPN 3099: q=56 alpha=26 beta=-4 bp@n&w



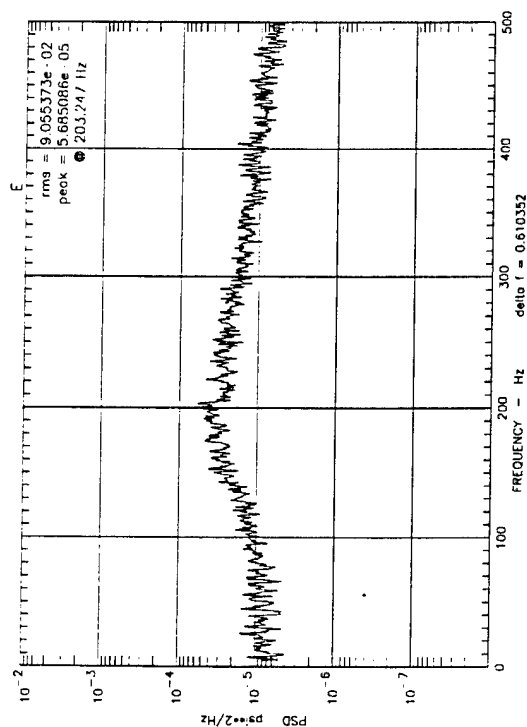
F 15 TPN\_3099: q=56 alpha=26 beta=-4 bp@n&w



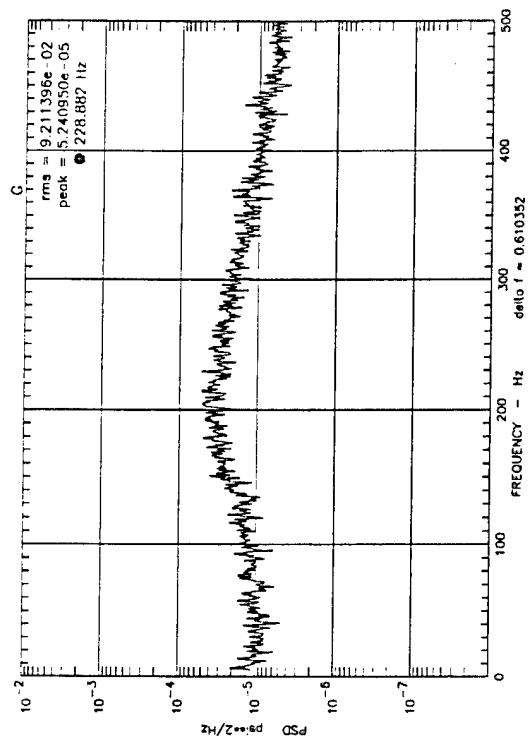
F 15 TPN\_3099: q=56 alpha=26 beta=-4 bp@n&w



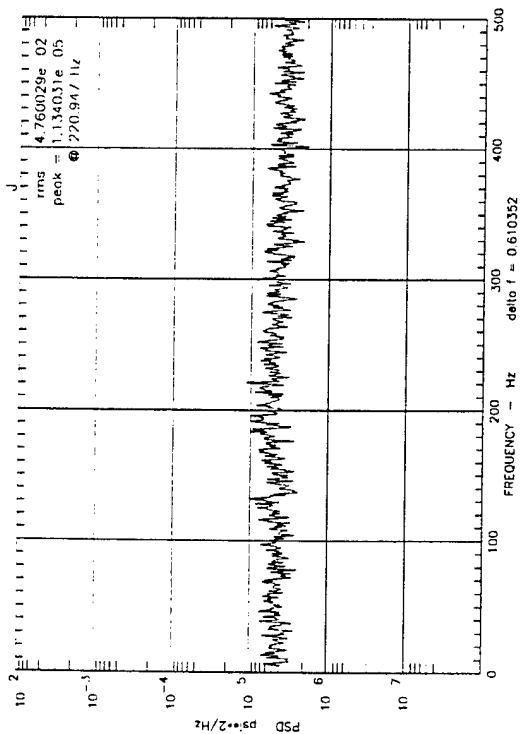
F 15 TPN\_3099: q=56 alpha=26 beta=-4 bp@n&w



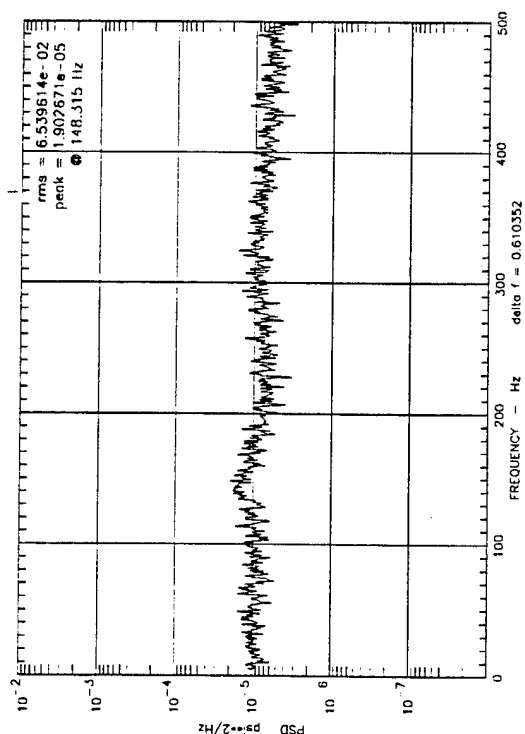
F 15 TPN\_3099: q=56 alpha=26 beta=-4 bp@n&w



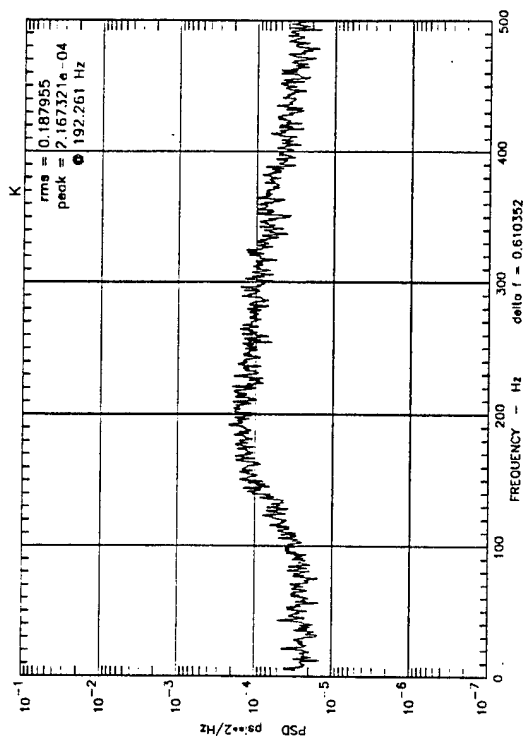
F 15 TPN 3099: q=56 alpha=26 beta=-4 bp@n&w



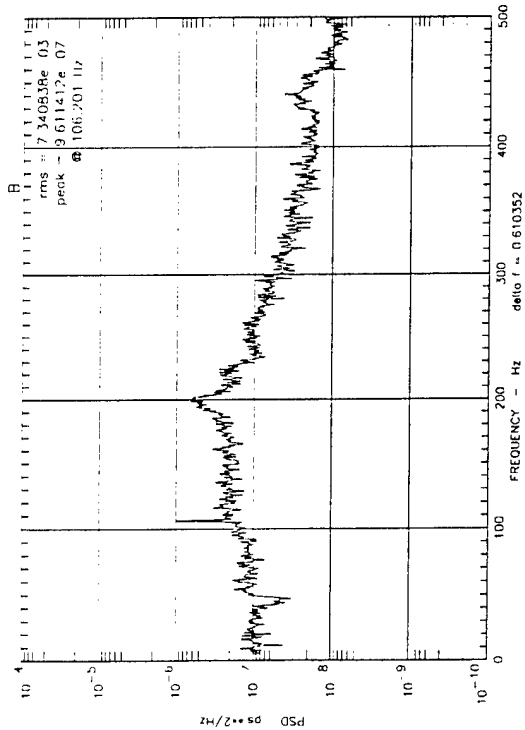
F-15 TPN\_3099: q=56 alpha=26 beta=-4 bp@n&w



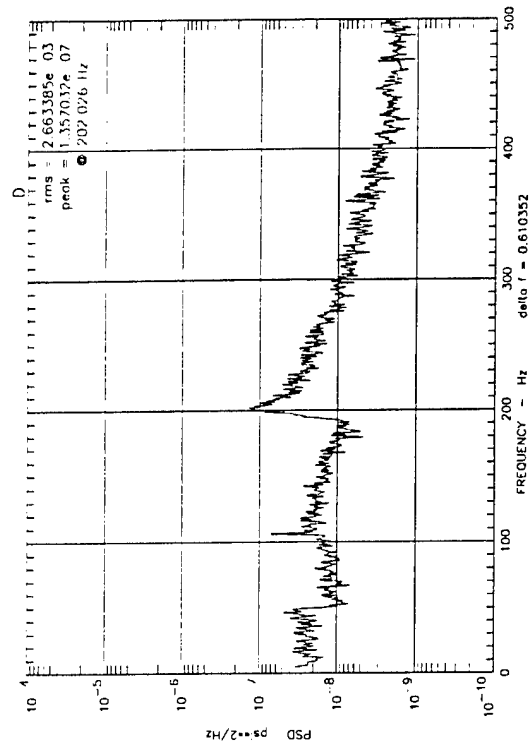
F-15 TPN\_3099: q=56 alpha=26 beta=-4 bp@n&w



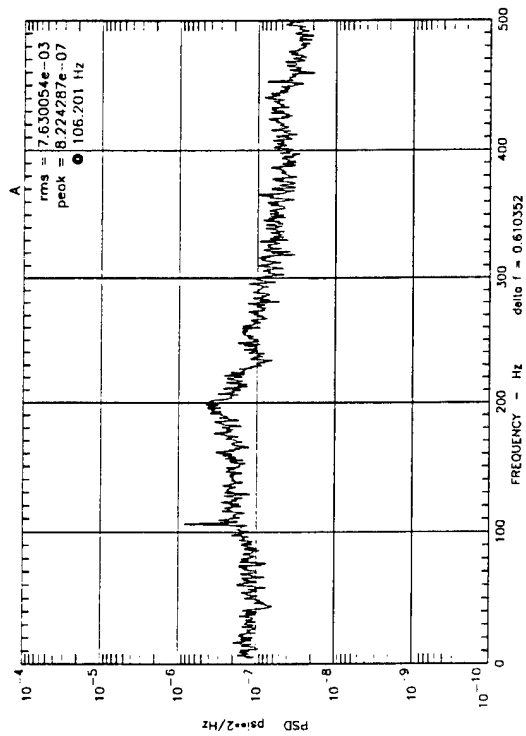
F 15 TPN 3100: q=56 alpha=16 beta=0 bp@n&w



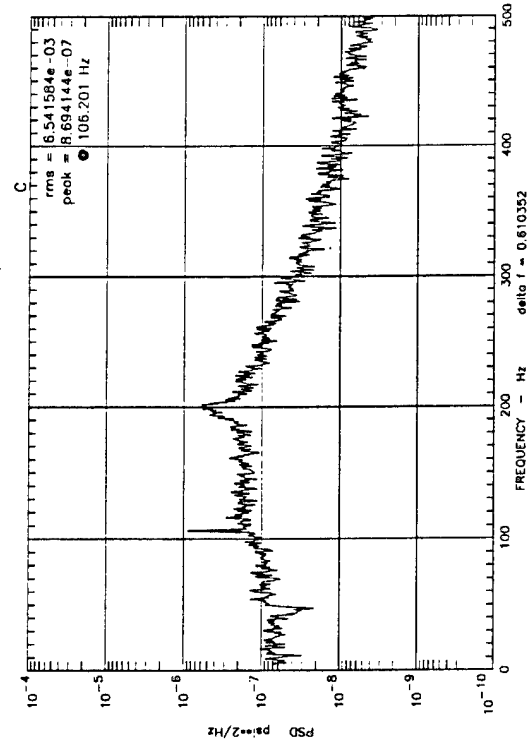
F -15 TPN 3100: q=56 alpha=16 beta=0 bp@n&w



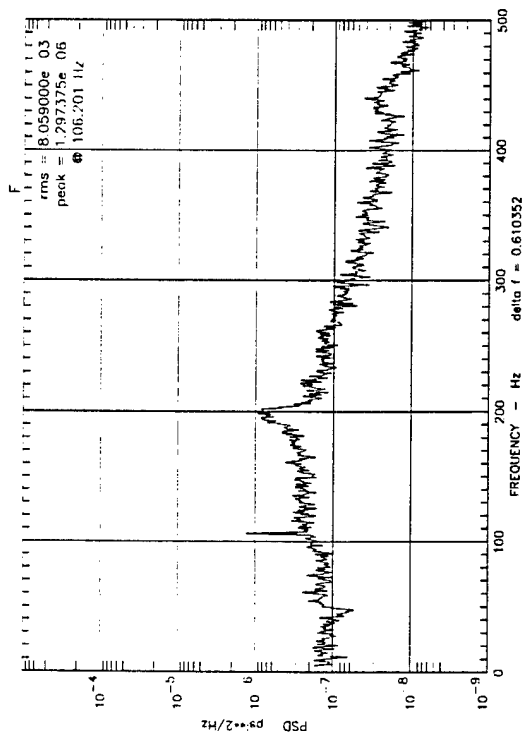
F-15 TPN 3100: q=56 alpha=16 beta=0 bp@n&w



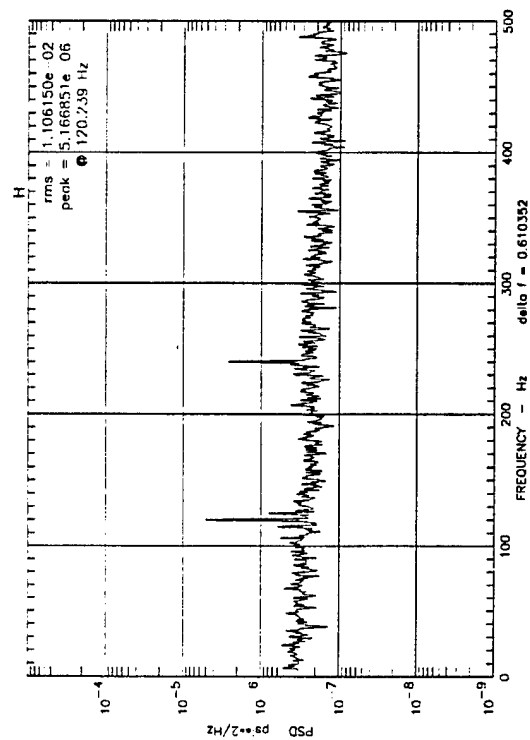
F-15 TPN 3100: q=56 alpha=16 beta=0 bp@n&w



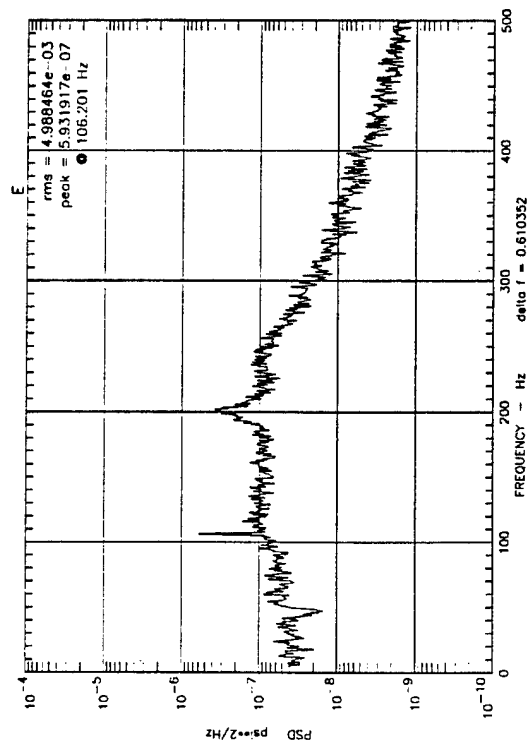
F-15 TPN\_3100: q=56 alpha=16 beta=0 bp@n&w



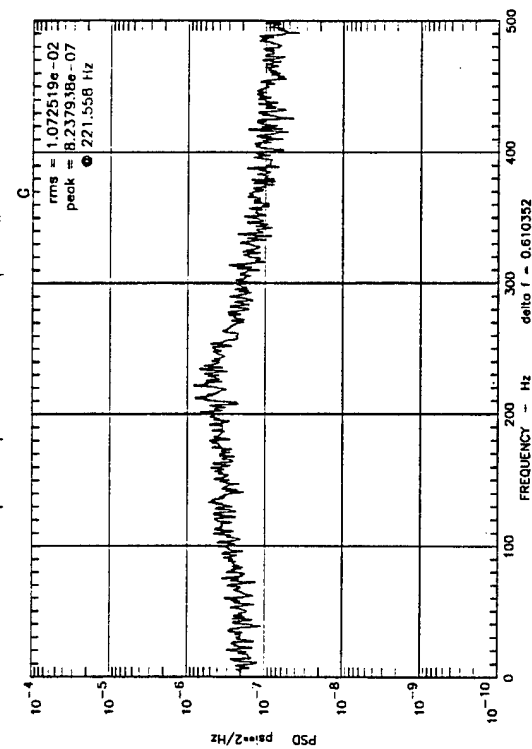
F-15 TPN\_3100: q=56 alpha=16 beta=0 bp@n&w



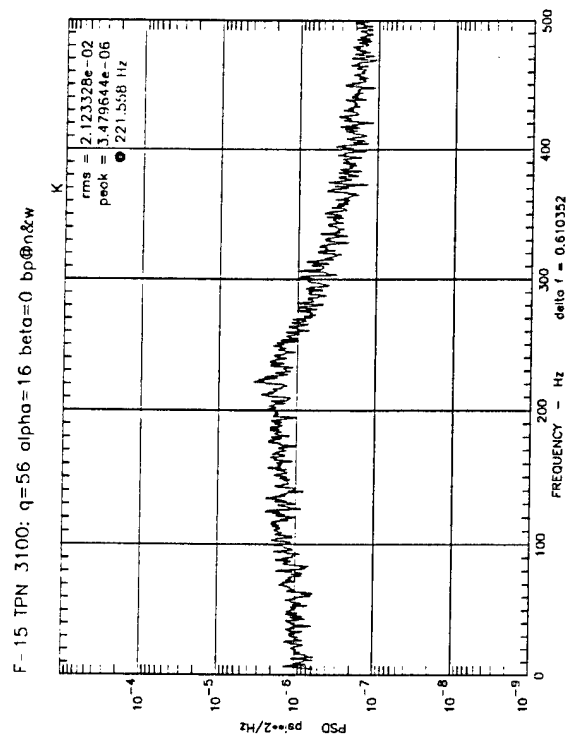
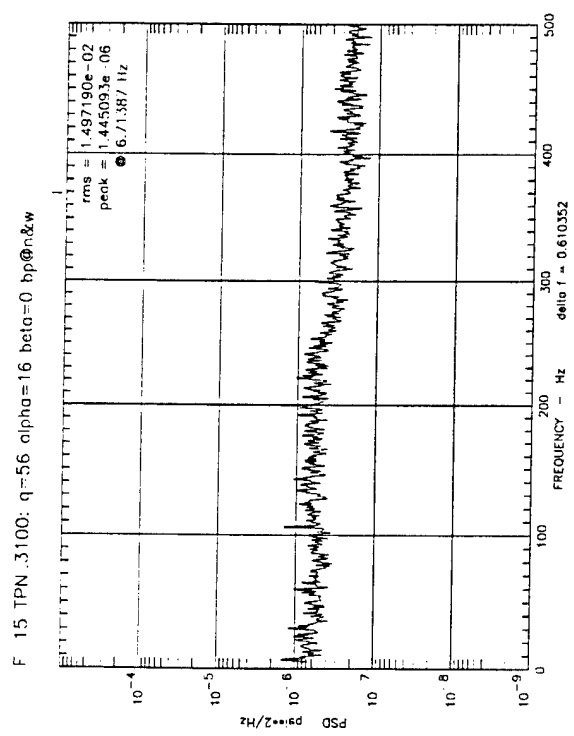
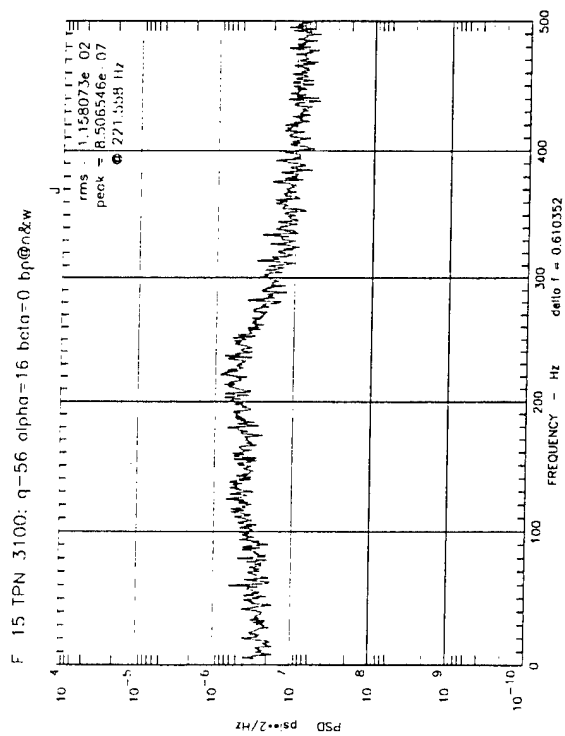
F-15 TPN\_3100: q=56 alpha=16 beta=0 bp@n&w



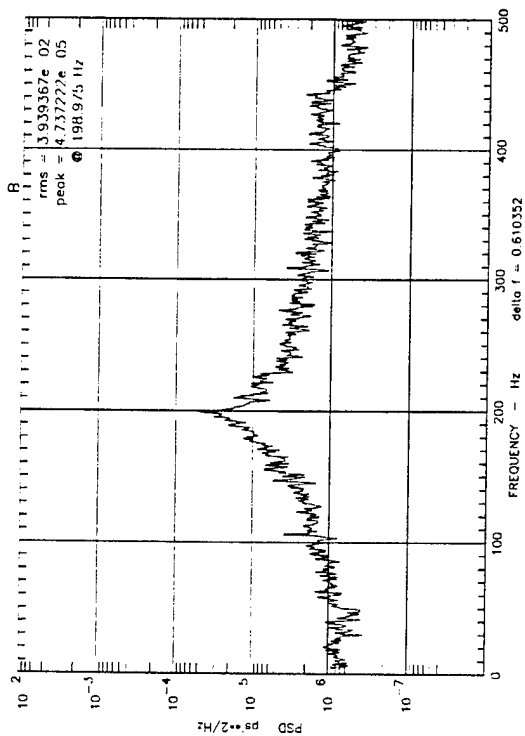
F-15 TPN\_3100: q=56 alpha=16 beta=0 bp@n&w



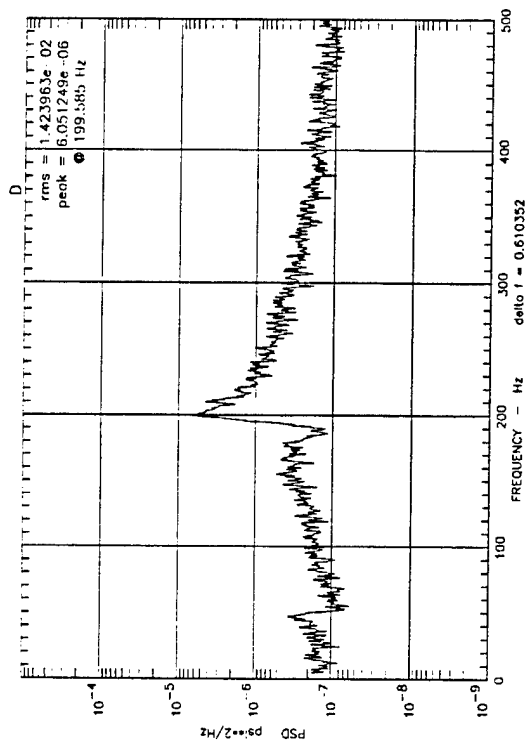




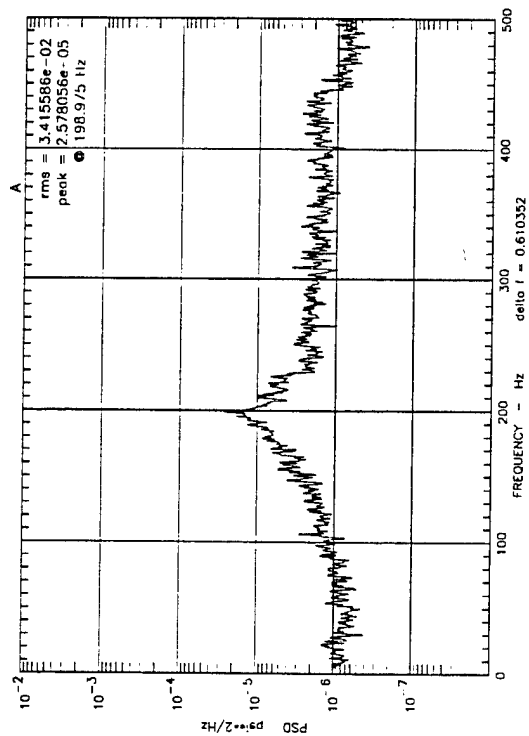
F-15 TPN\_3102: q=56 alpha=20 beta=0 bp@n&w



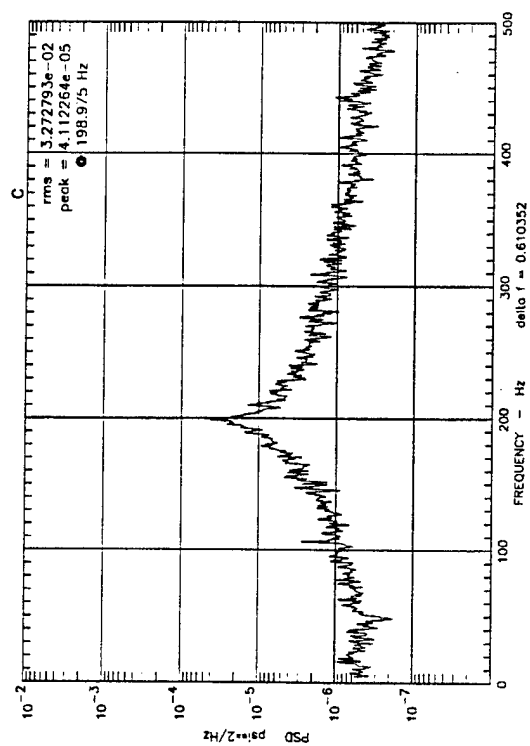
F-15 TPN\_3102: q=56 alpha=20 beta=0 bp@n&w



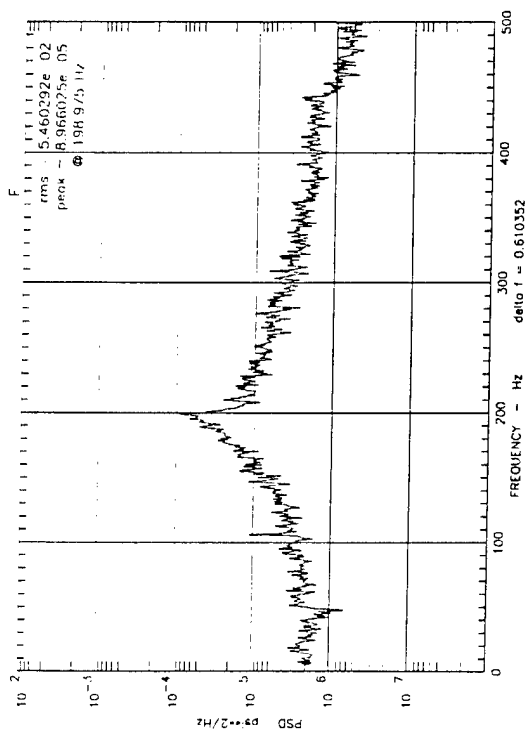
F-15 TPN\_3102: q=56 alpha=20 beta=0 bp@n&w



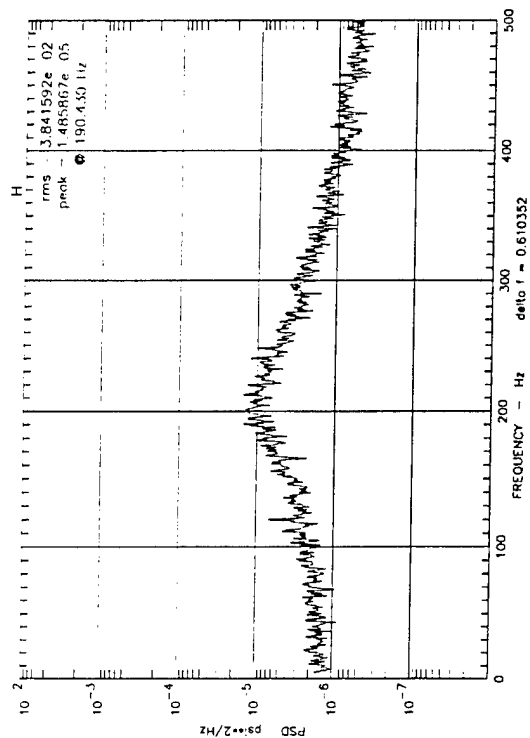
F-15 TPN\_3102: q=56 alpha=20 beta=0 bp@n&w



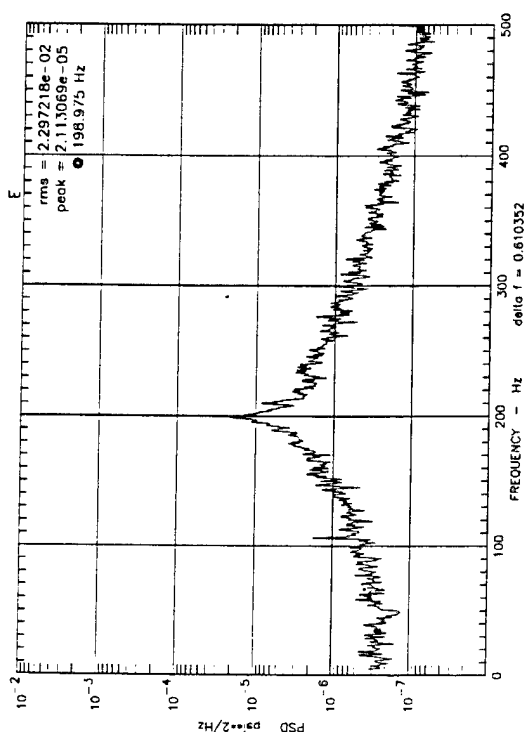
F-15 TPN 3102: q=56 alpha=20 beta=0 bp@n&w



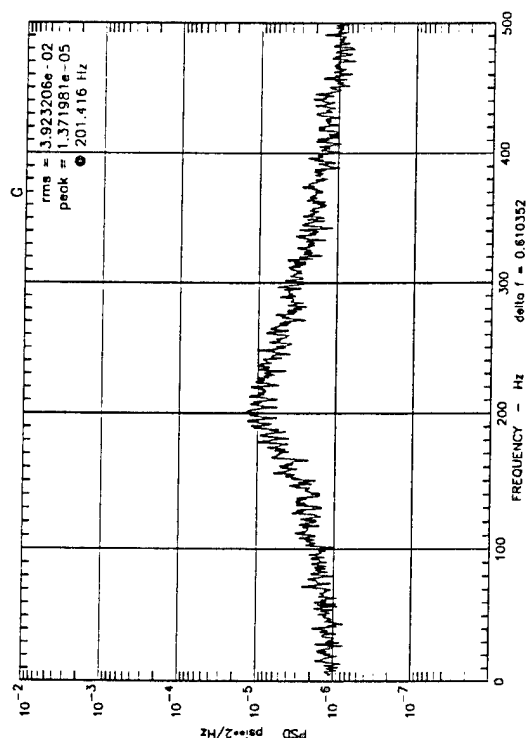
F-15 TPN 3102: q=56 alpha=20 beta=0 bp@n&w



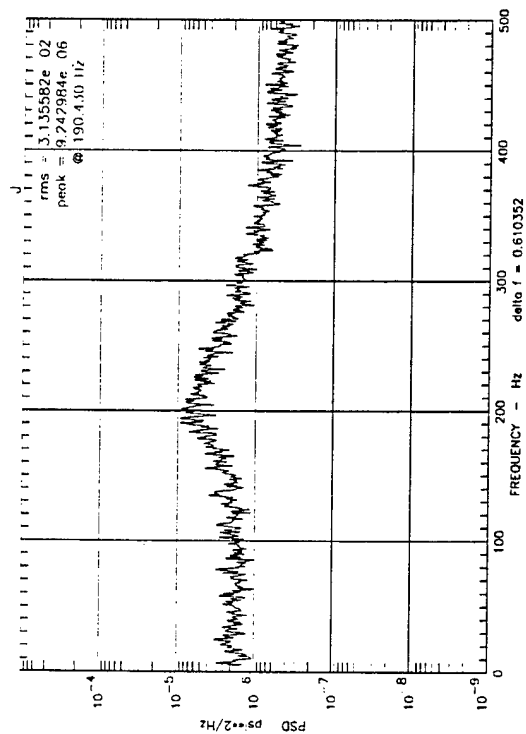
F-15 TPN 3102: q=56 alpha=20 beta=0 bp@n&w



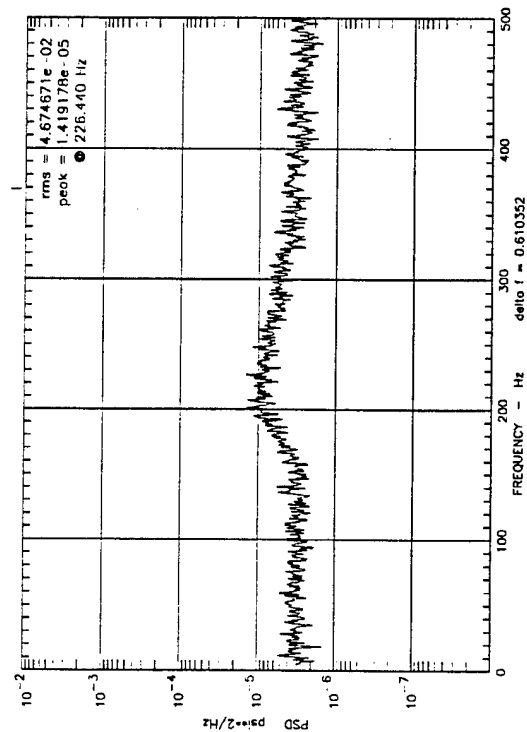
F-15 TPN 3102: q=56 alpha=20 beta=0 bp@n&w



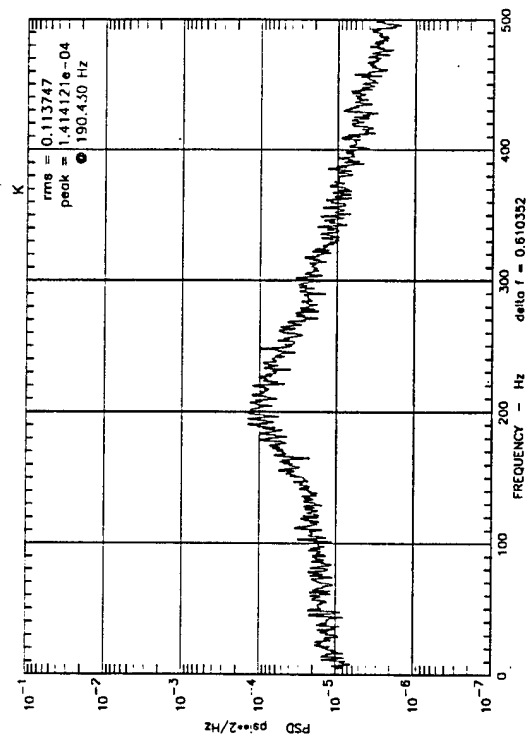
F-15 TPN\_3102: q=56 alpha=20 beta=0 bp@n&w



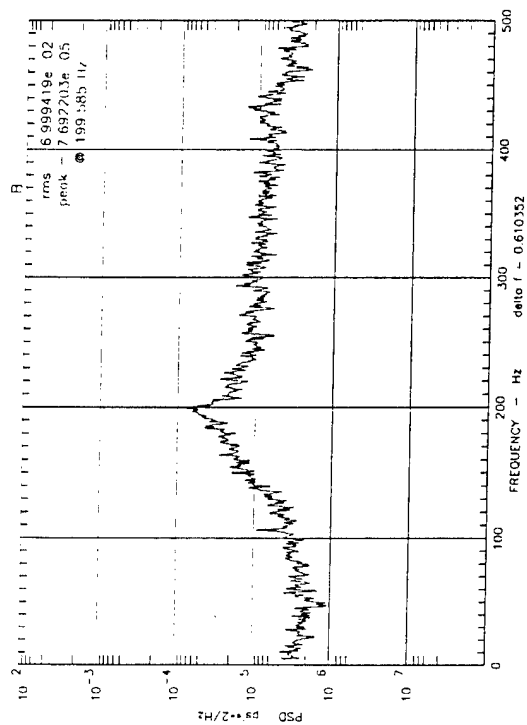
F-15 TPN\_3102: q=56 alpha=20 beta=0 bp@n&w



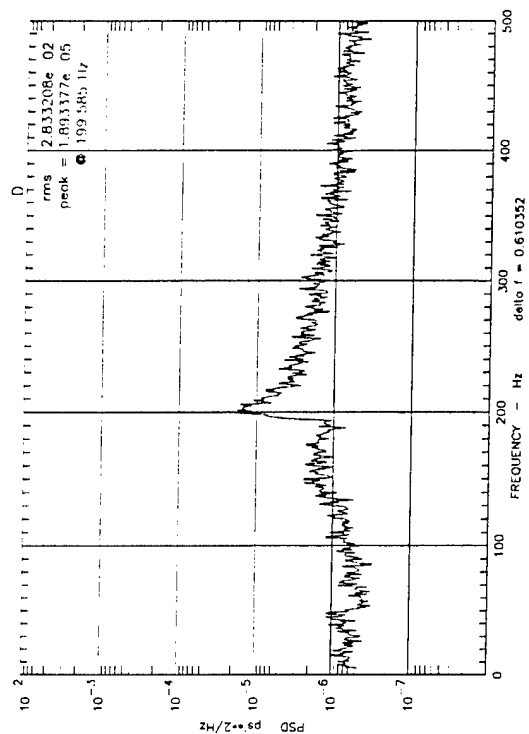
F-15 TPN\_3102: q=56 alpha=20 beta=0 bp@n&w



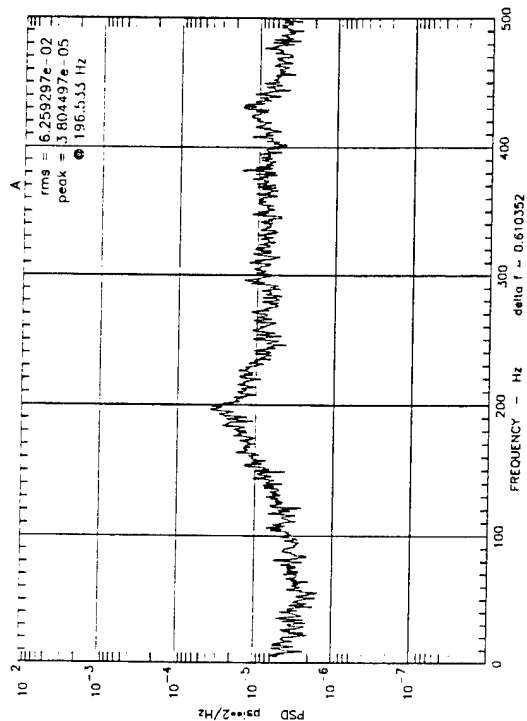
F 15 TPN 3104: q=56 alpha=24 beta=0 bp@n&w



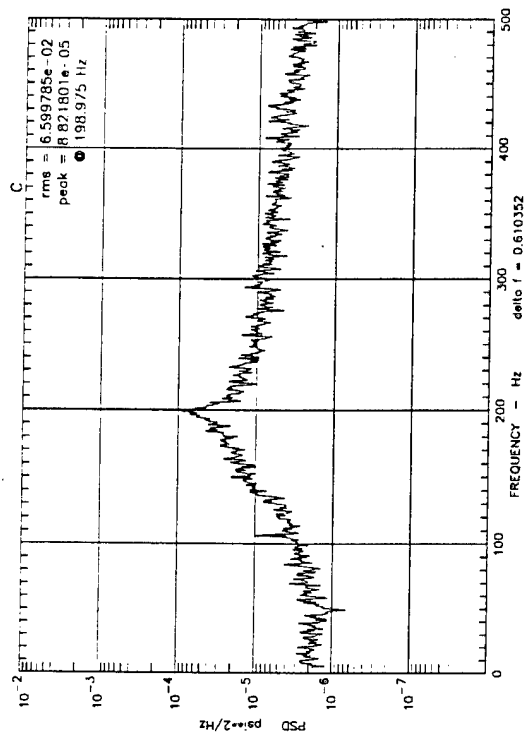
F 15 TPN 3104: q=56 alpha=24 beta=0 bp@n&w



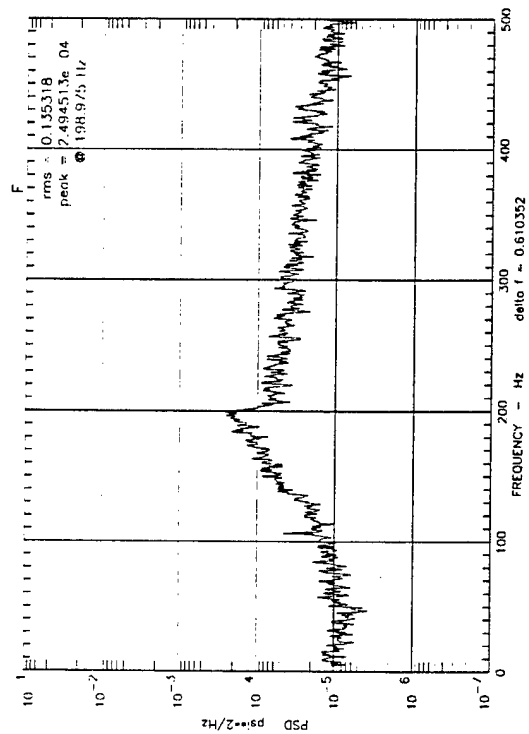
F 15 TPN 3104: q=56 alpha=24 beta=0 bp@n&w



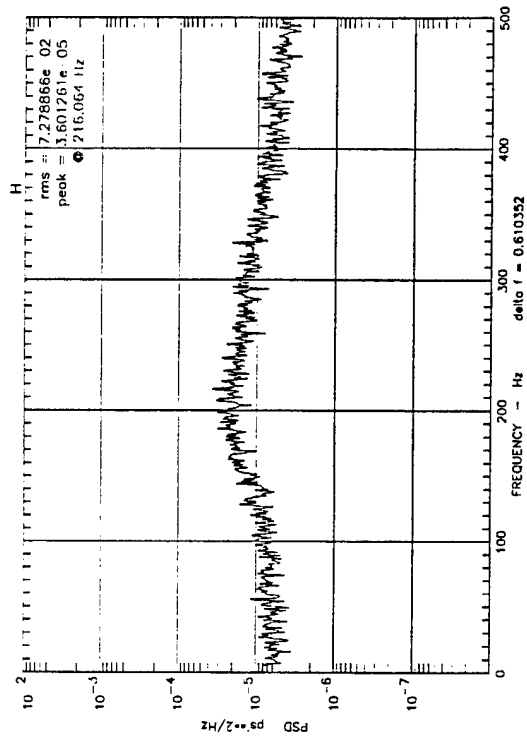
F 15 TPN 3104: q=56 alpha=24 beta=0 bp@n&w



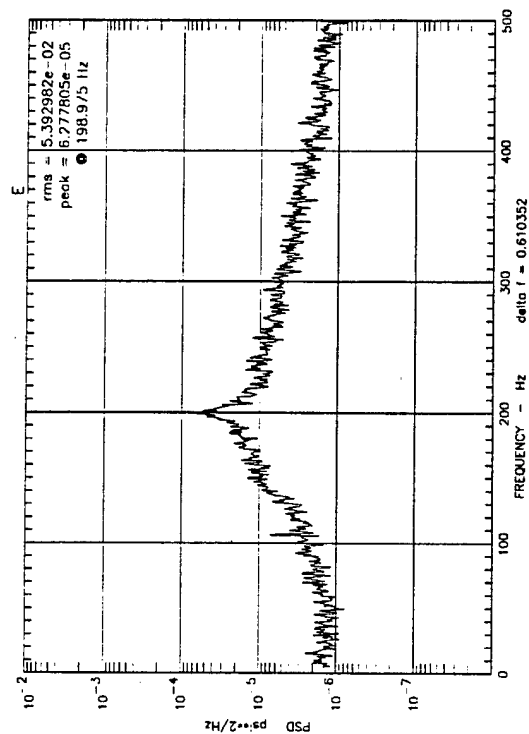
F 15 TPN\_3104: q=56 alpha=24 beta=0 bp@n&w



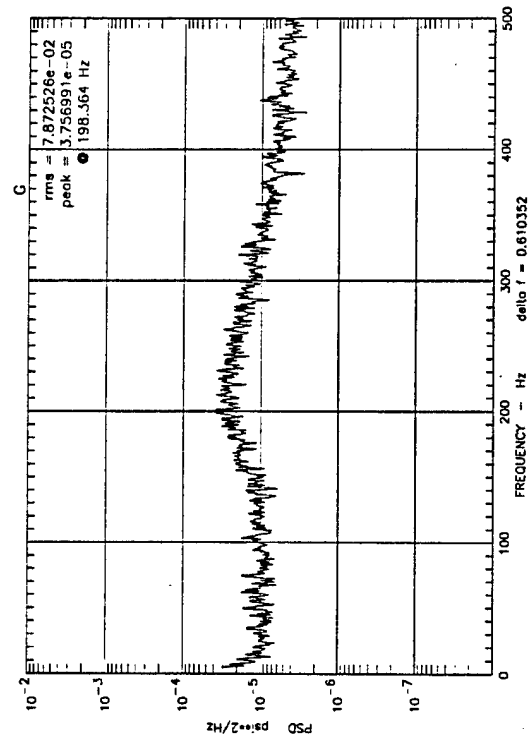
F-15 TPN\_3104: q=56 alpha=24 beta=0 bp@n&w

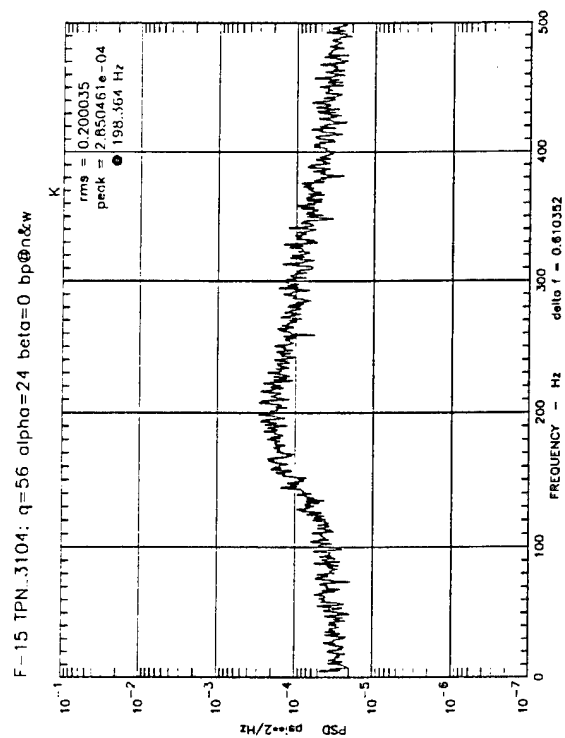
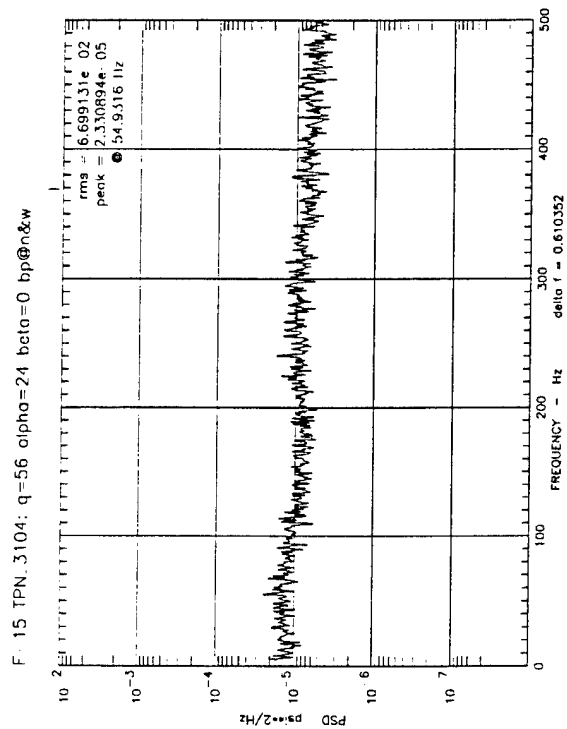
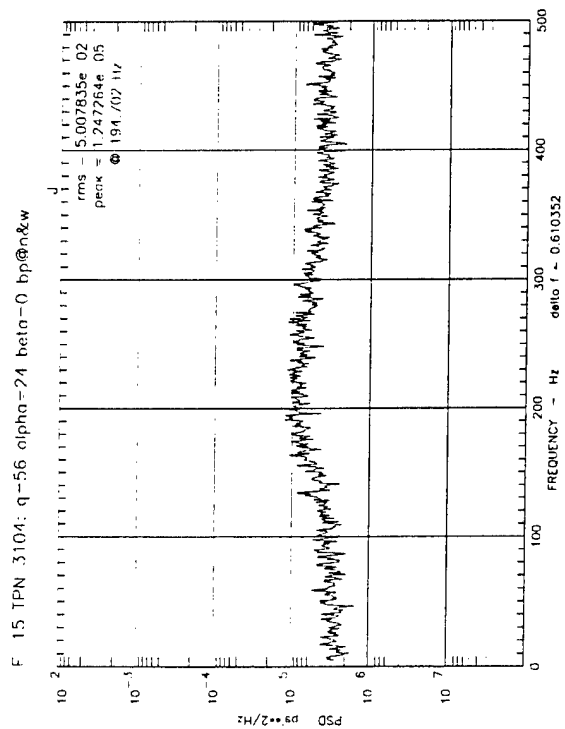


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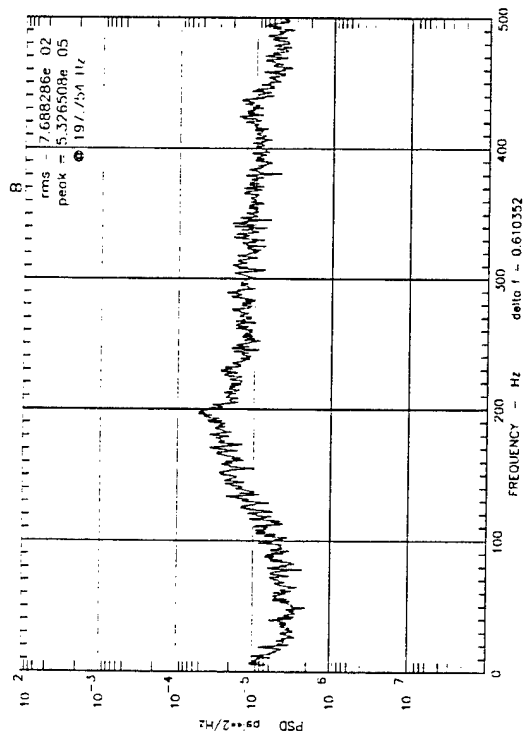


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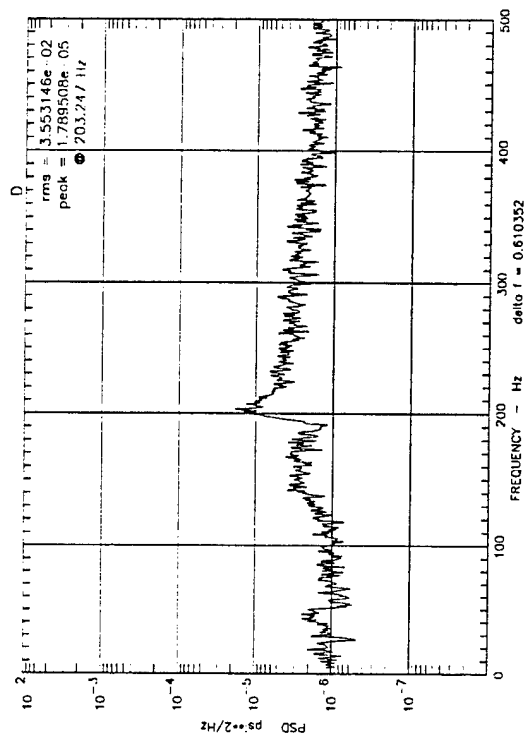




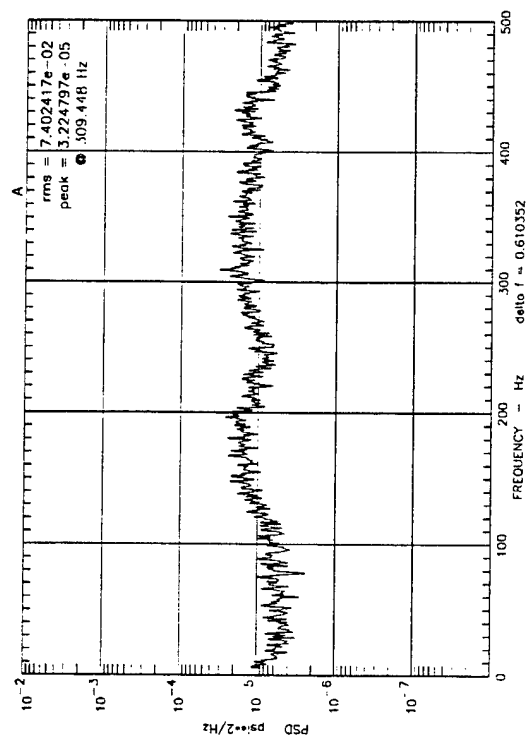
F 15 TPN\_3105: q=56 alpha=26 beta=0 bp@n&w



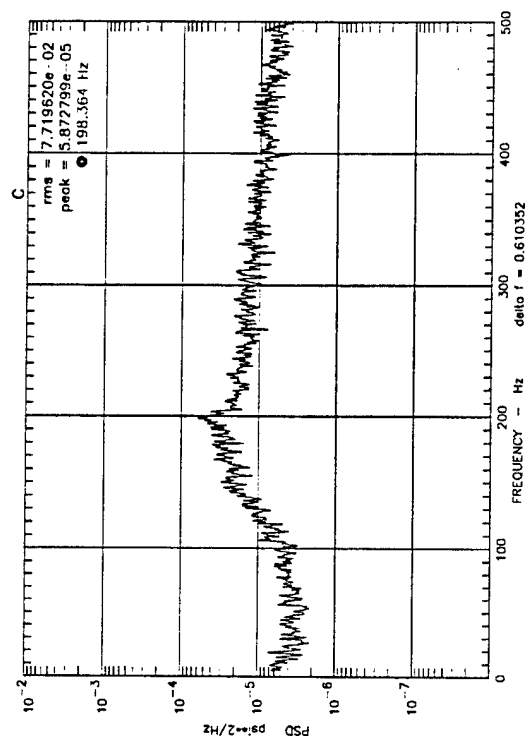
F-15 TPN\_3105: q=56 alpha=26 beta=0 bp@n&w



F-15 TPN\_3105: q=56 alpha=26 beta=0 bp@n&w

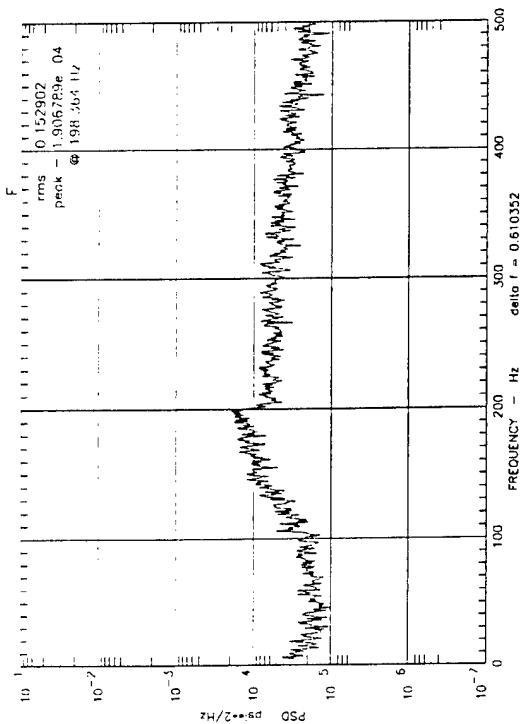


F-15 TPN\_3105: q=56 alpha=26 beta=0 bp@n&w

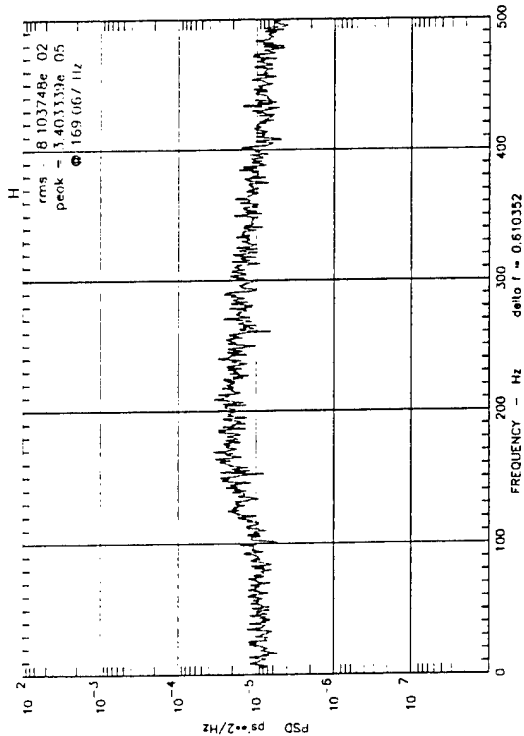




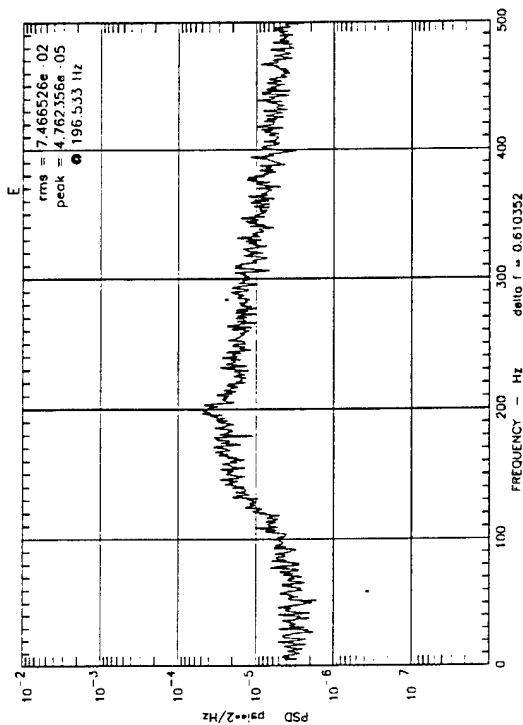
F-15 TPN\_3105; q=56 alpha=26 beta=0 bp@n&w



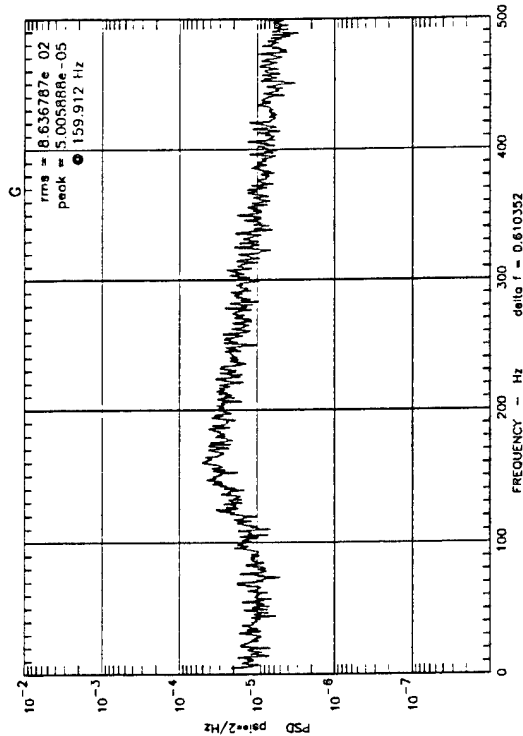
F-15 TPN\_3105; q=56 alpha=26 beta=0 bp@n&w



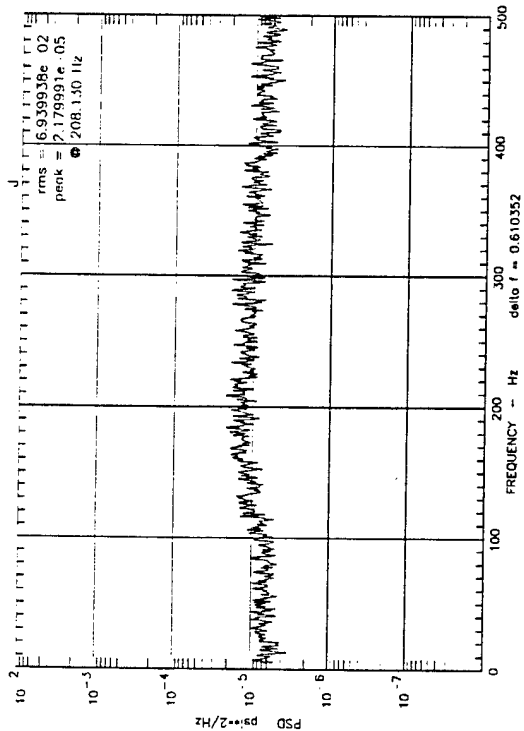
F-15 TPN\_3105; q=56 alpha=26 beta=0 bp@n&w



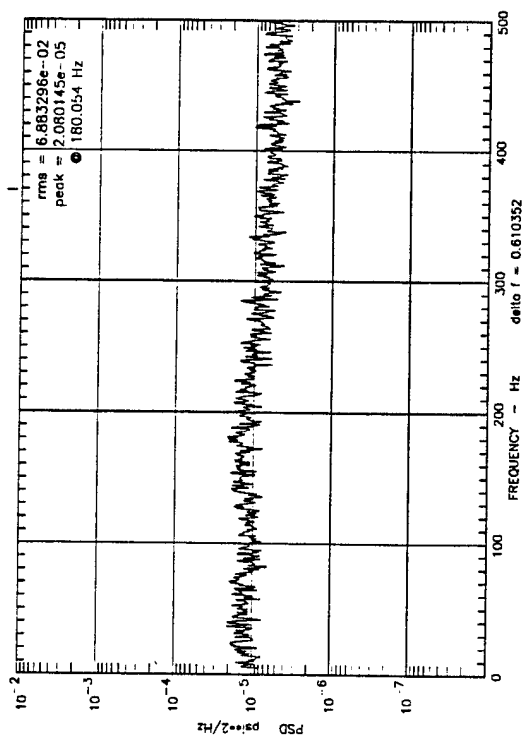
F-15 TPN\_3105; q=56 alpha=26 beta=0 bp@n&w



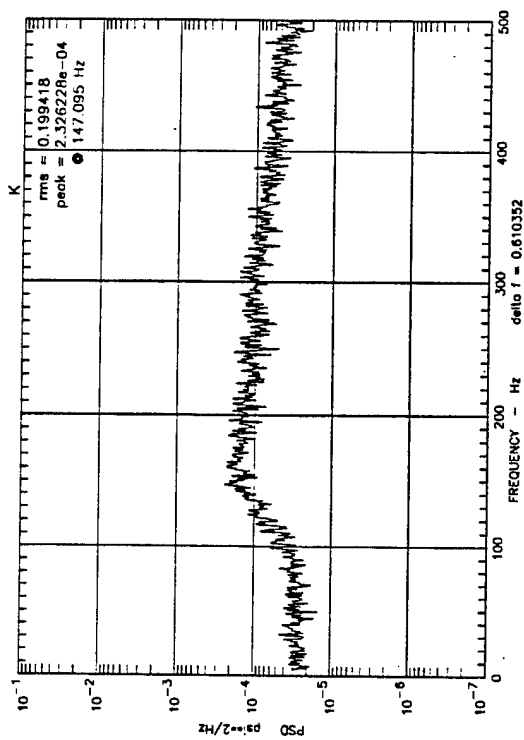
F-15 TPN\_3105: q=56 alpha=26 beta=0 bp@n&w



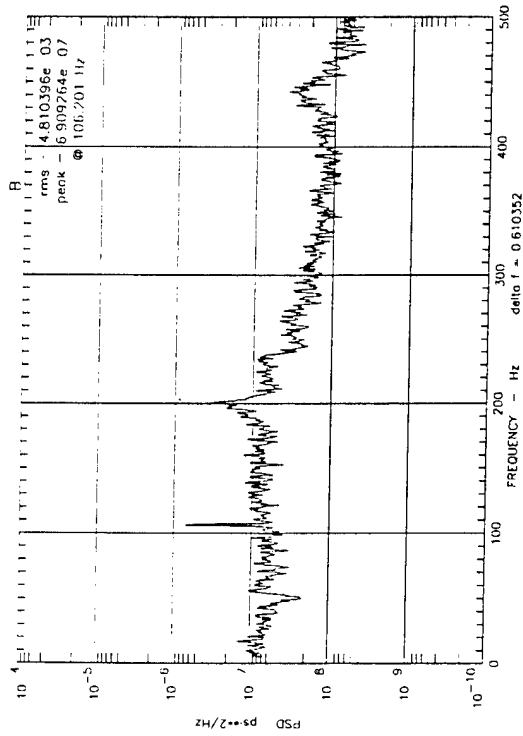
F-15 TPN\_3105: q=56 alpha=26 beta=0 bp@n&w



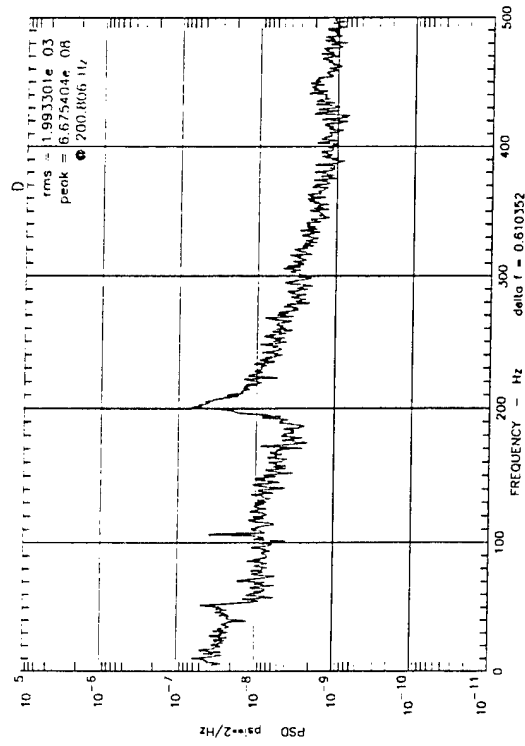
F-15 TPN\_3105: q=56 alpha=26 beta=0 bp@n&w



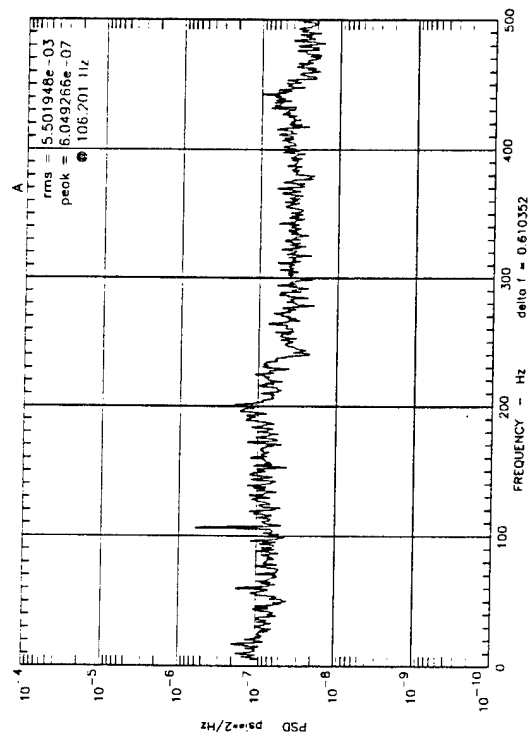
F 15 TPN 3106: q=56 alpha=16 beta=4 bp@n&w



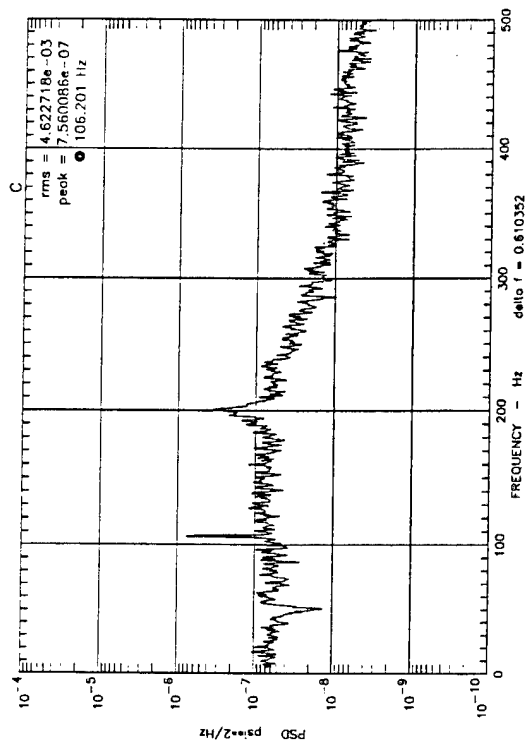
F 15 TPN 3106: q=56 alpha=16 beta=4 bp@n&w



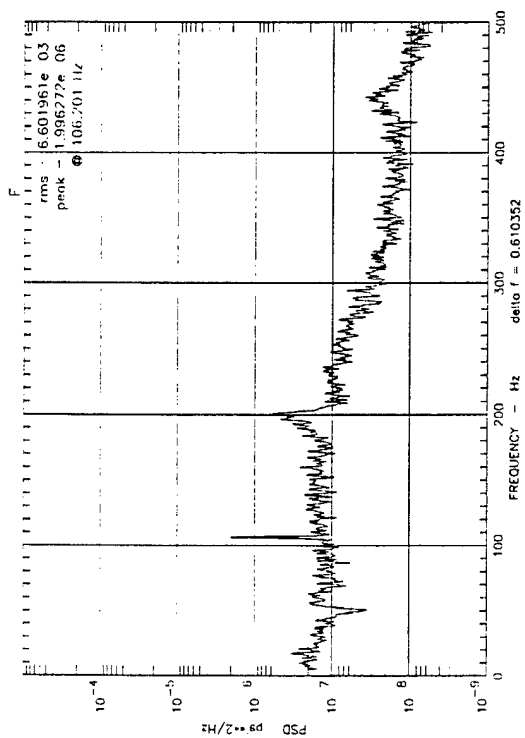
F 15 TPN 3106: q=56 alpha=16 beta=4 bp@n&w



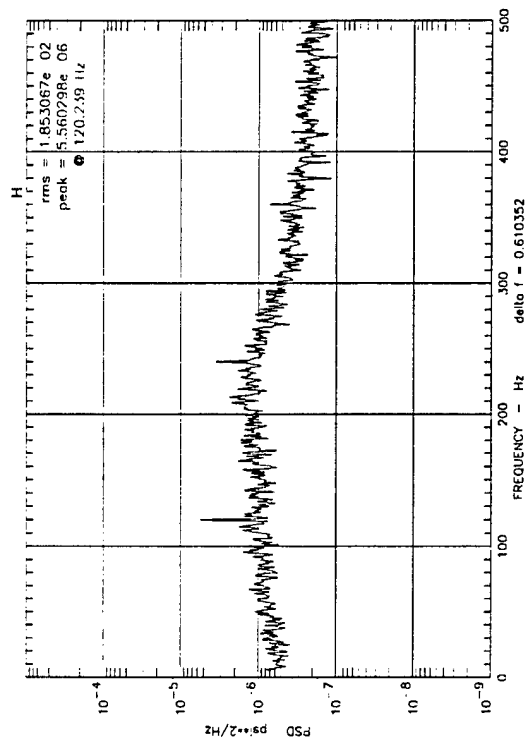
F 15 TPN 3106: q=56 alpha=16 beta=4 bp@n&w



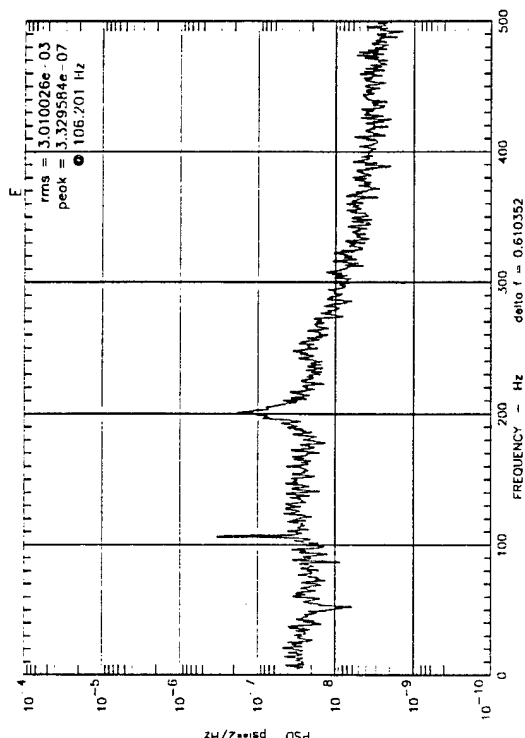
F 15 TPN 3106: q=56 alpha=16 beta=4 bp@n&w



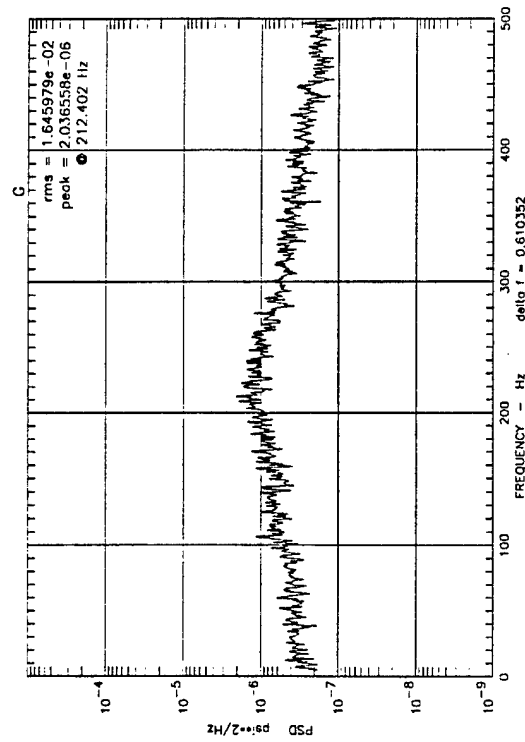
H 15 TPN 3106: q=56 alpha=16 beta=4 bp@n&w



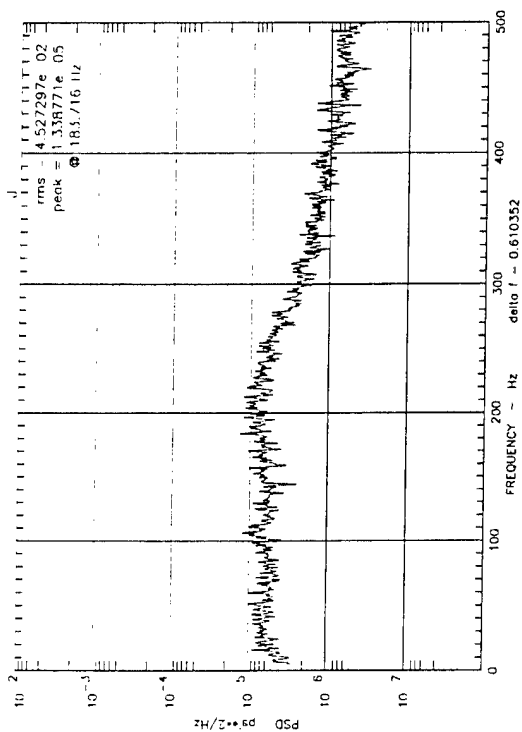
E 15 TPN 3106: q=56 alpha=16 beta=4 bp@n&w



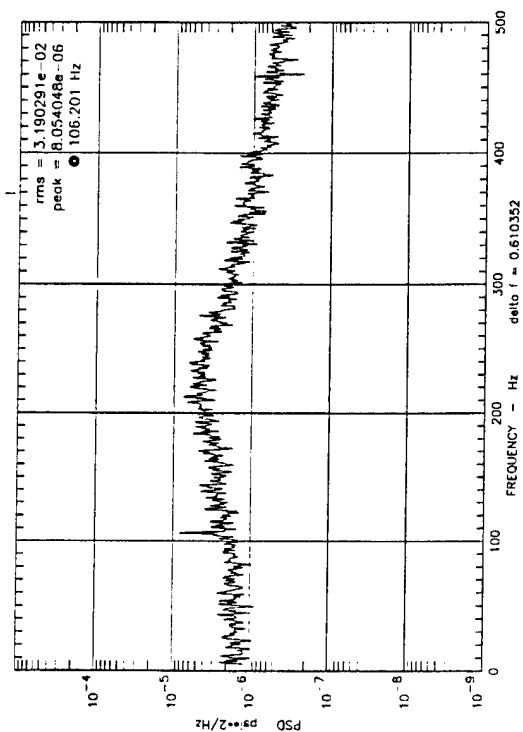
G 15 TPN 3106: q=56 alpha=16 beta=4 bp@n&w



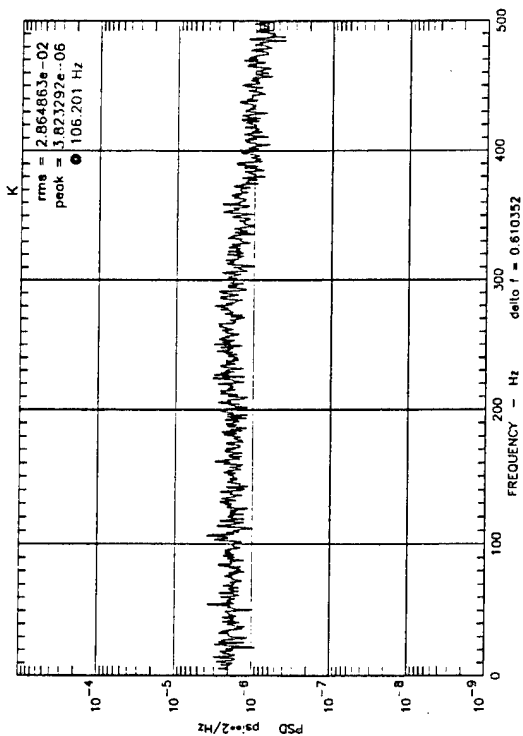
F-15 TPN\_3106: q=56 alpha=16 beta=4 bp@n&w



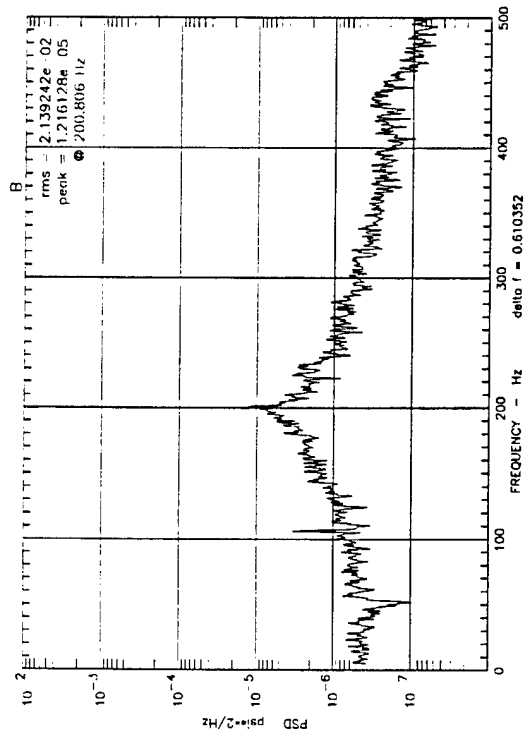
F-15 TPN\_3106: q=56 alpha=16 beta=4 bp@n&w



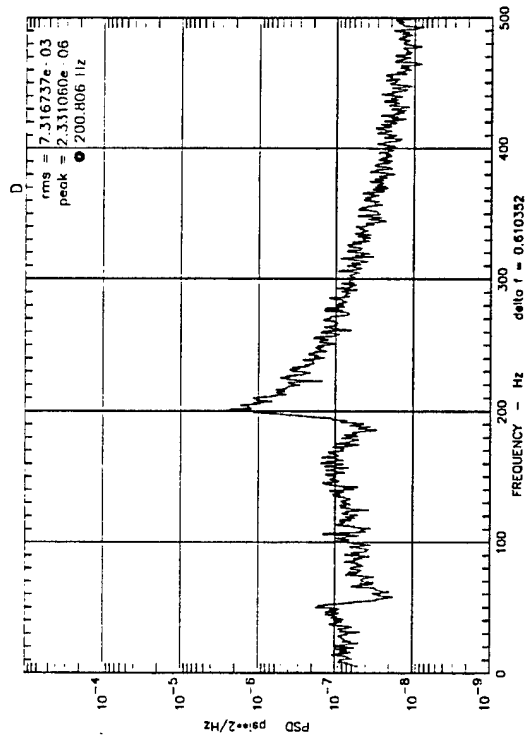
F-15 TPN\_3106: q=56 alpha=16 beta=4 bp@n&w



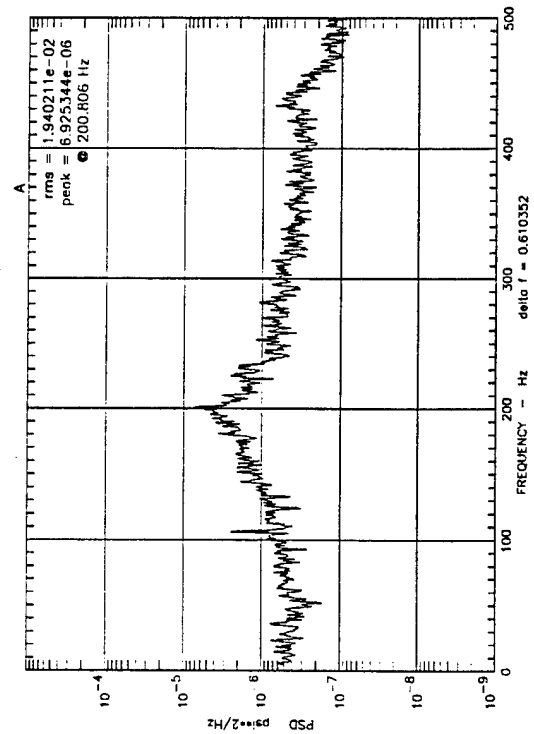
F-15 TPN\_3108: q=56 alpha=20 beta=4 bp@n&w



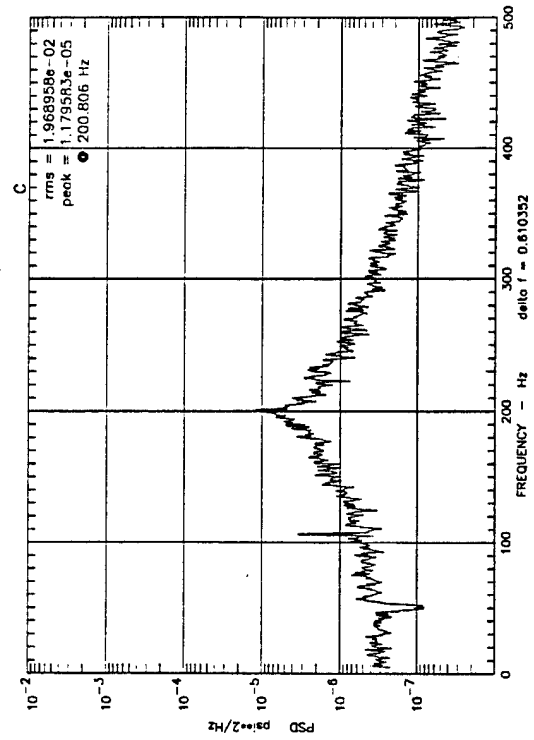
F-15 TPN\_3108: q=56 alpha=20 beta=4 bp@n&w

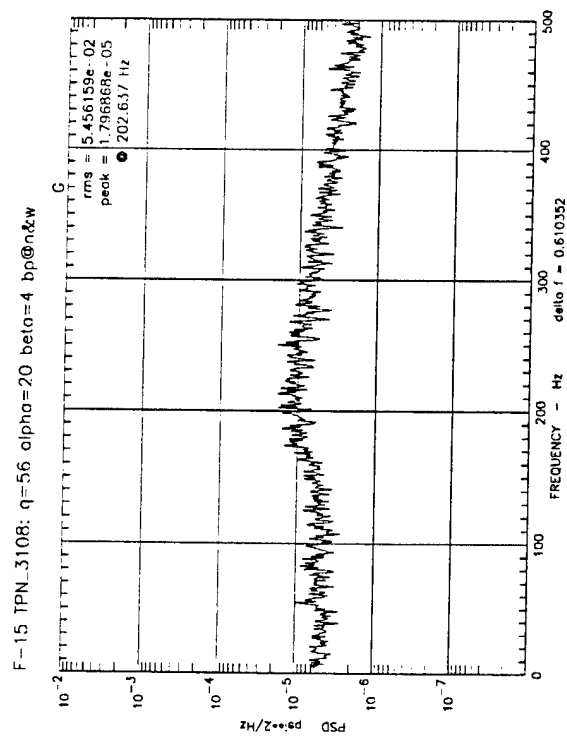
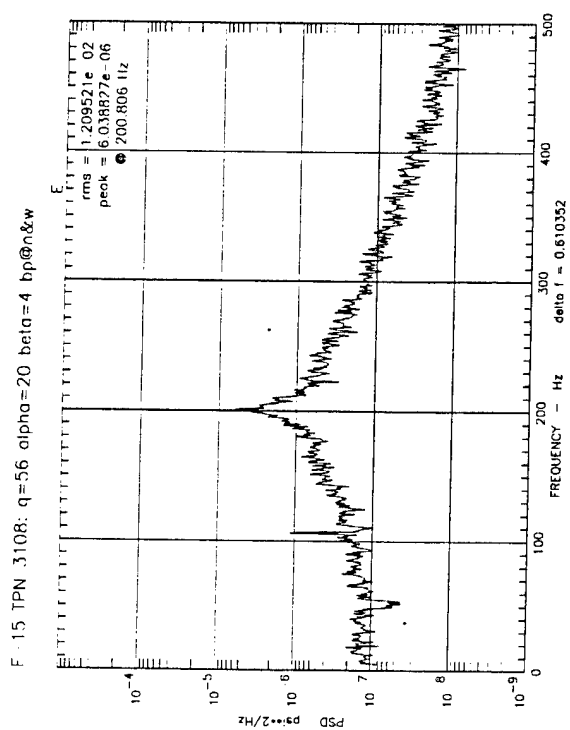
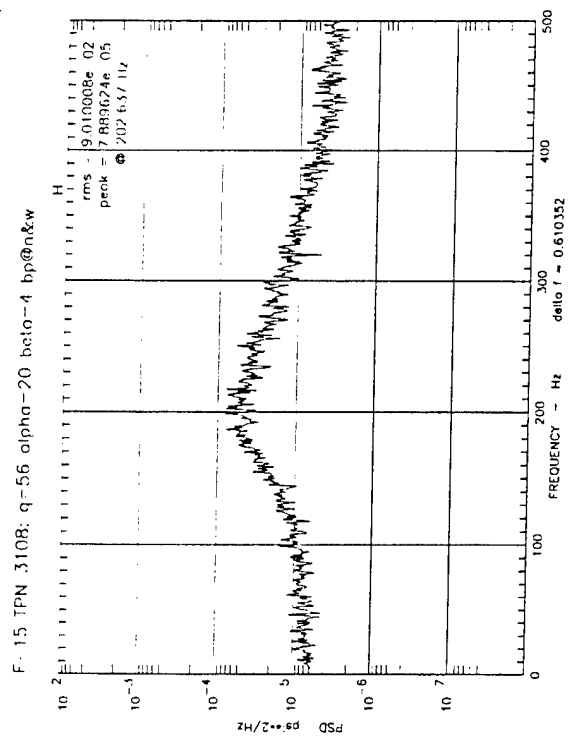
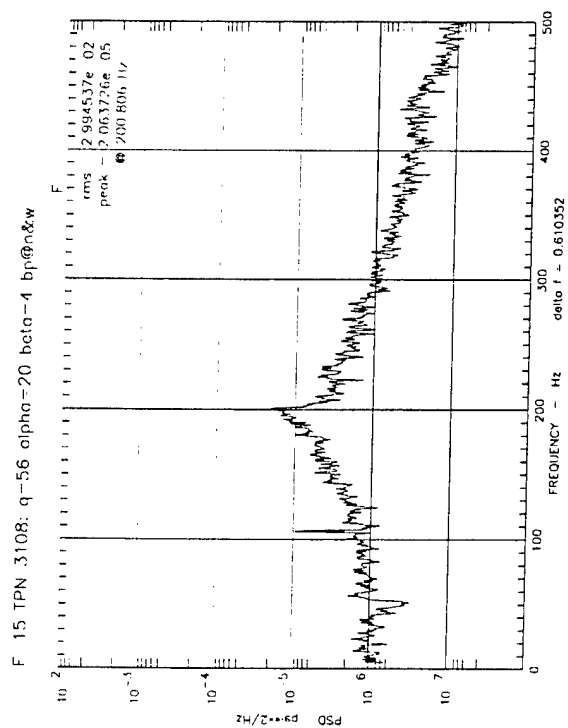


F-15 TPN\_3108: q=56 alpha=20 beta=4 bp@n&w

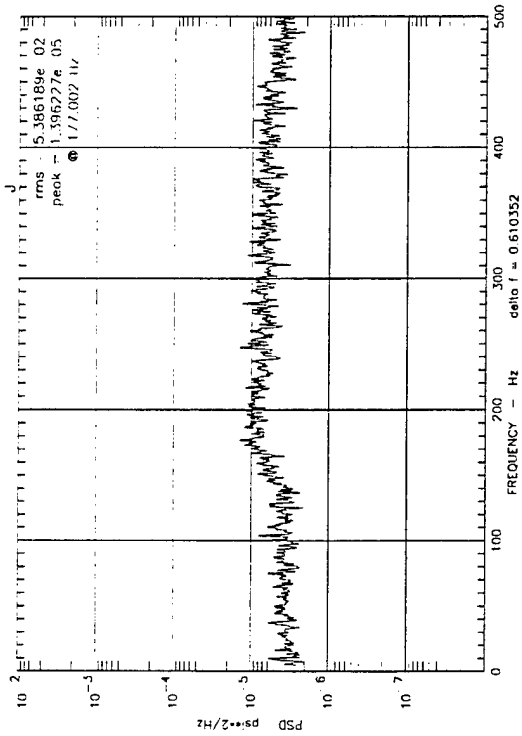


F-15 TPN\_3108: q=56 alpha=20 beta=4 bp@n&w

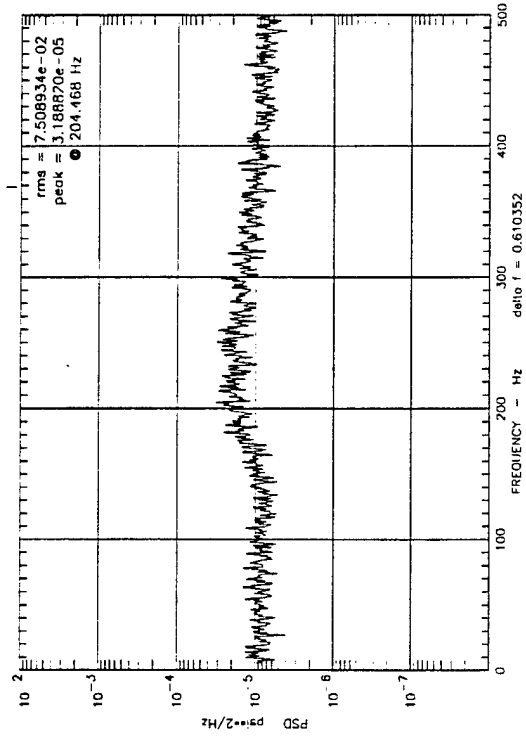




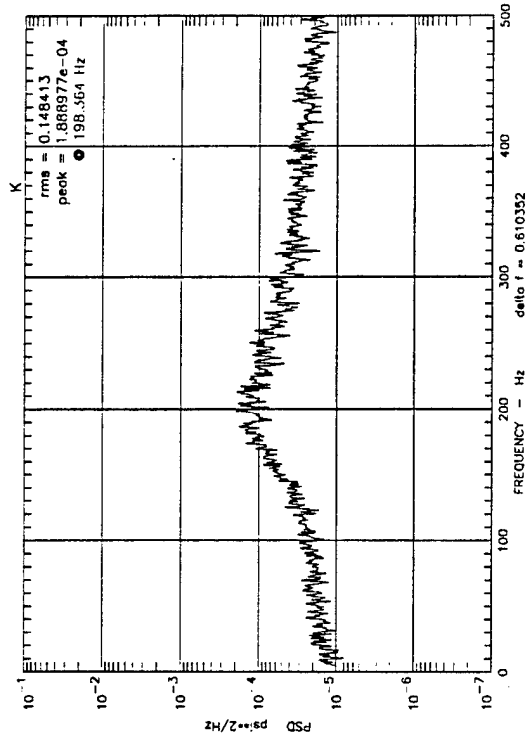
F-15 TPN\_3108: q=56 alpha=20 beta=4 bp@n&w



F-15 TPN\_3108: q=56 alpha=20 beta=4 bp@n&w

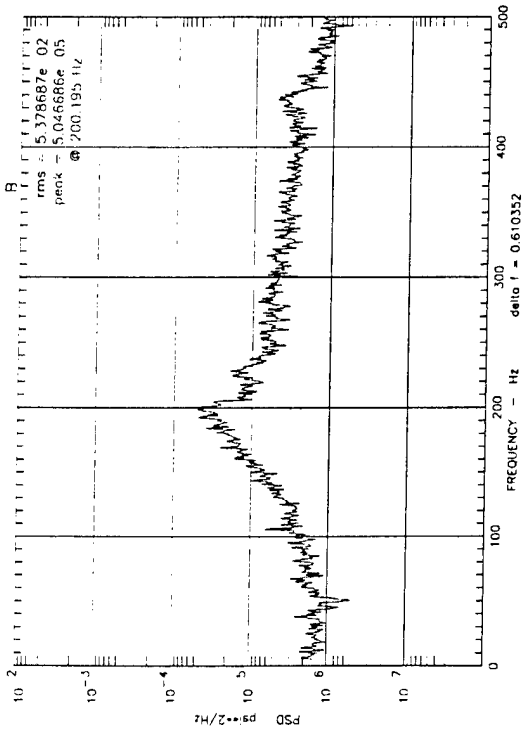


F-15 TPN\_3108: q=56 alpha=20 beta=4 bp@n&w

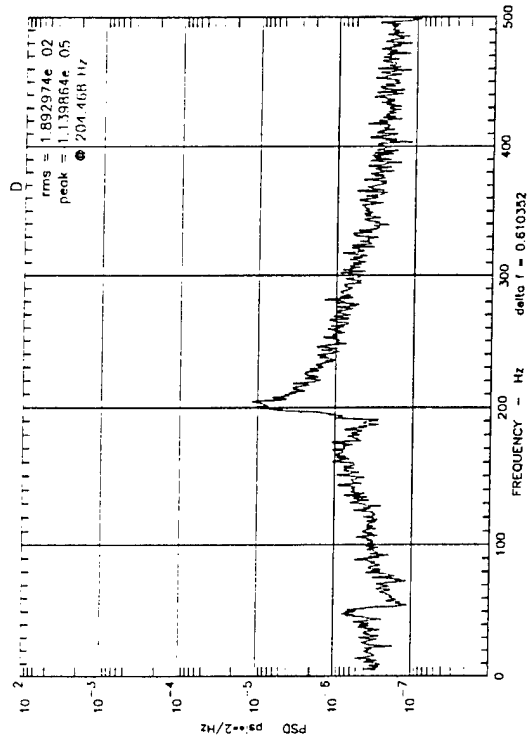




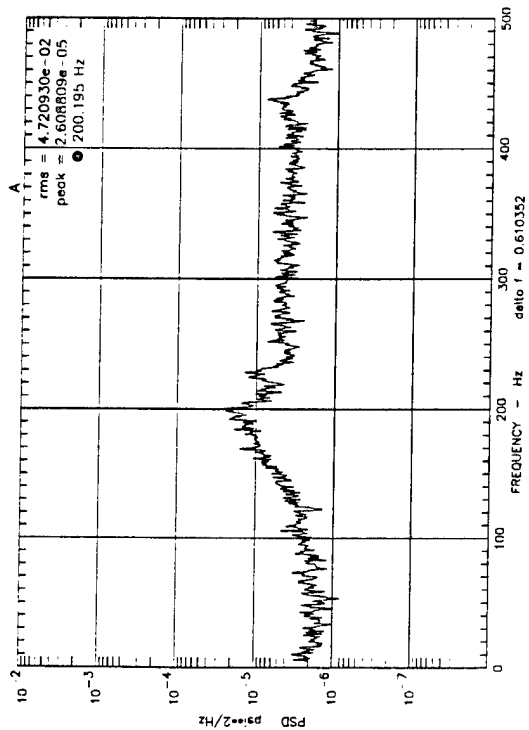
F 15 TPN 3110: q=56 alpha=24 beta=4 bp@n&w



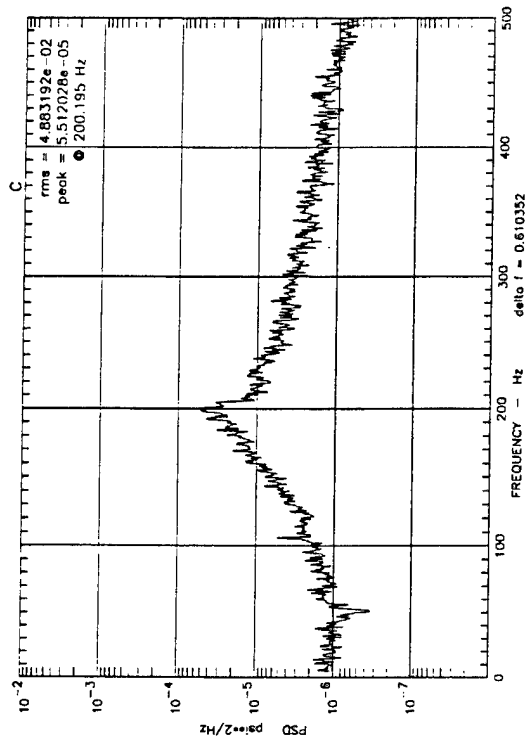
F 15 TPN 3110: q=56 alpha=24 beta=4 bp@n&w



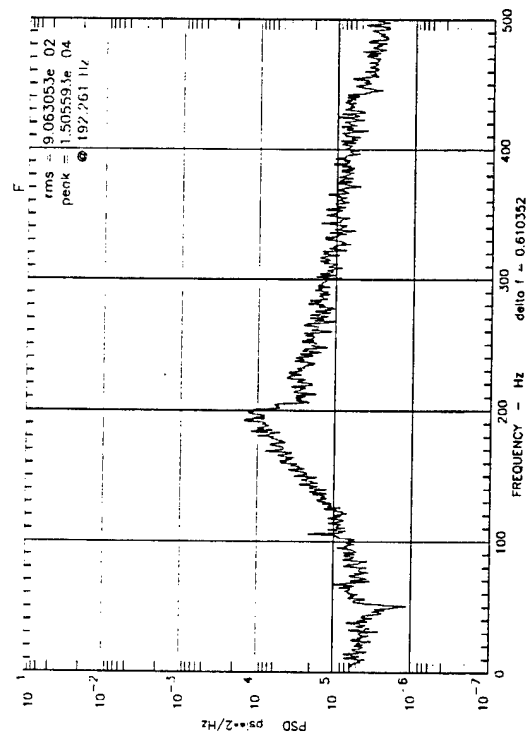
F 15 TPN 3110: q=56 alpha=24 beta=4 bp@n&w



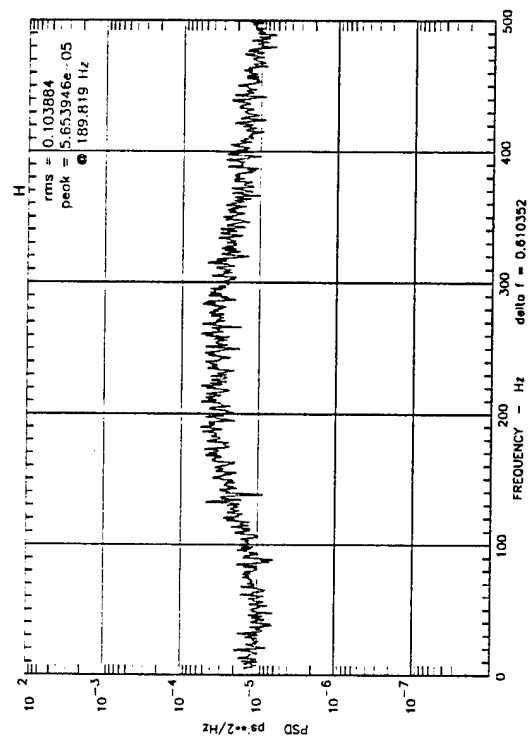
F 15 TPN 3110: q=56 alpha=24 beta=4 bp@n&w



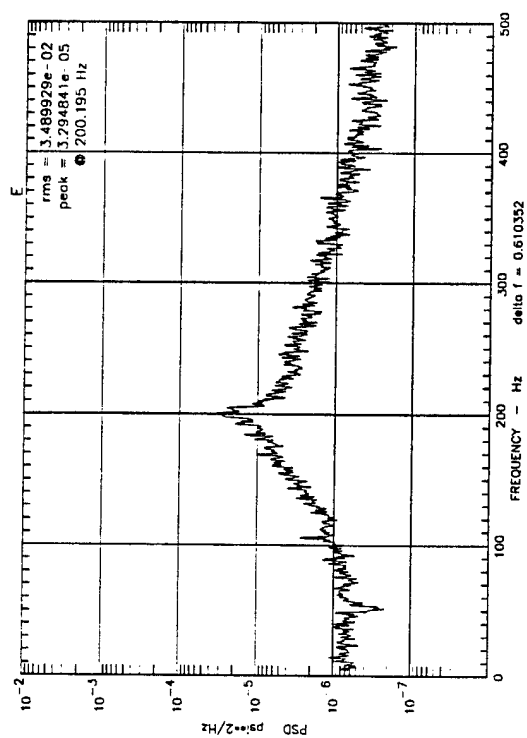
F 15 TPN 3110: q=56 alpha=24 beta=4 bp@n&w



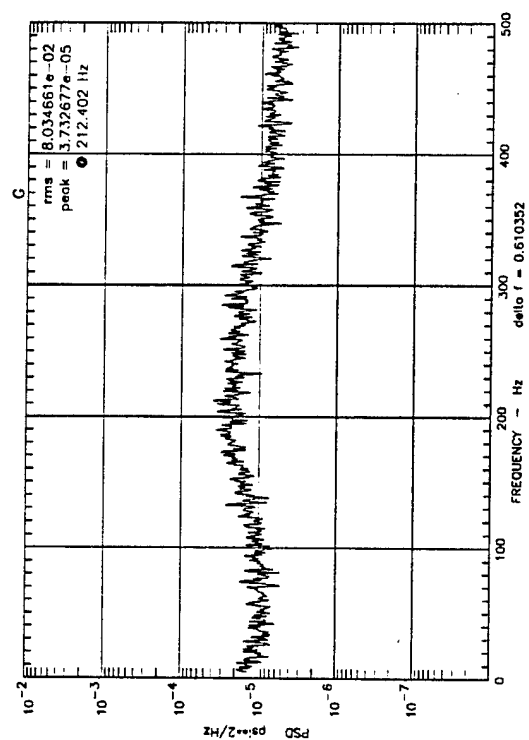
H -15 TPN 3110: q=56 alpha=24 beta=4 bp@n&w

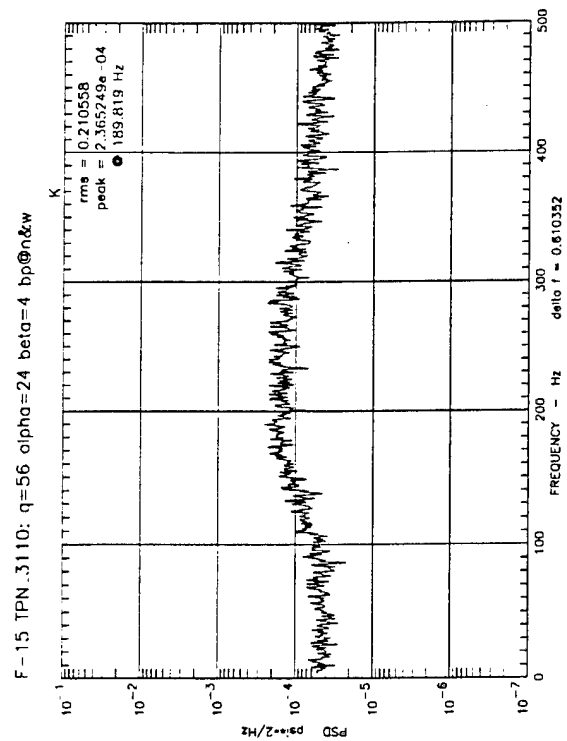
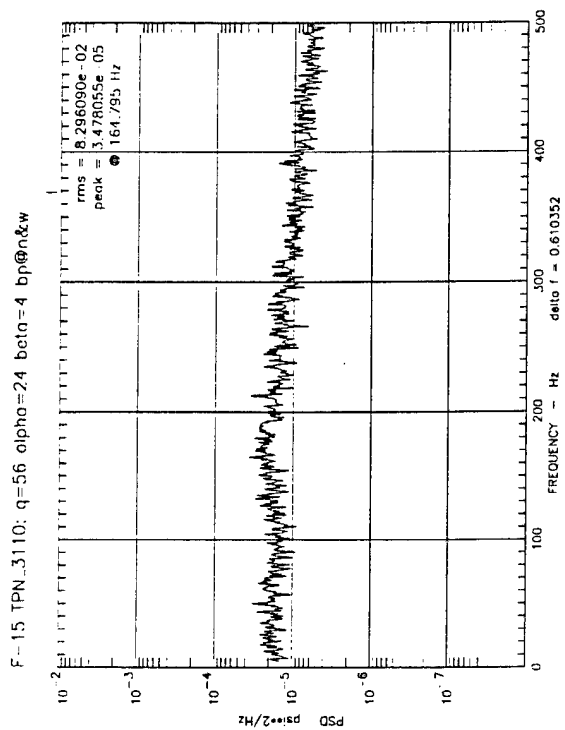
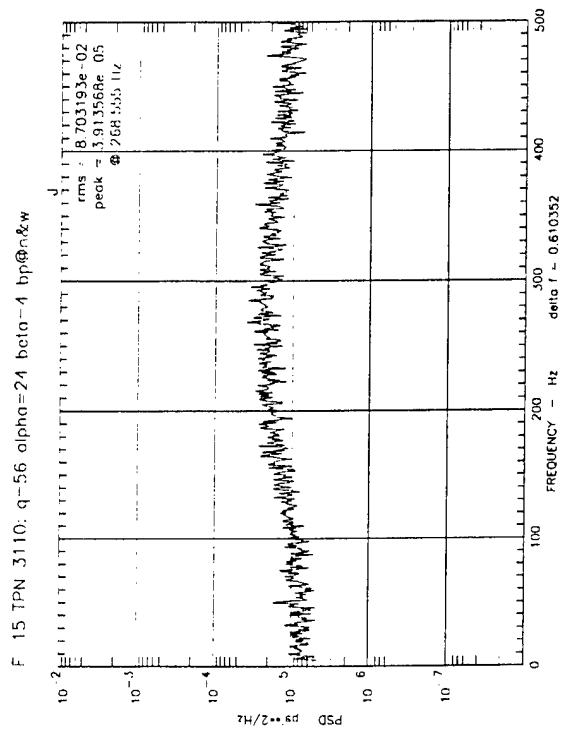


E -15 TPN 3110: q=56 alpha=24 beta=4 bp@n&w

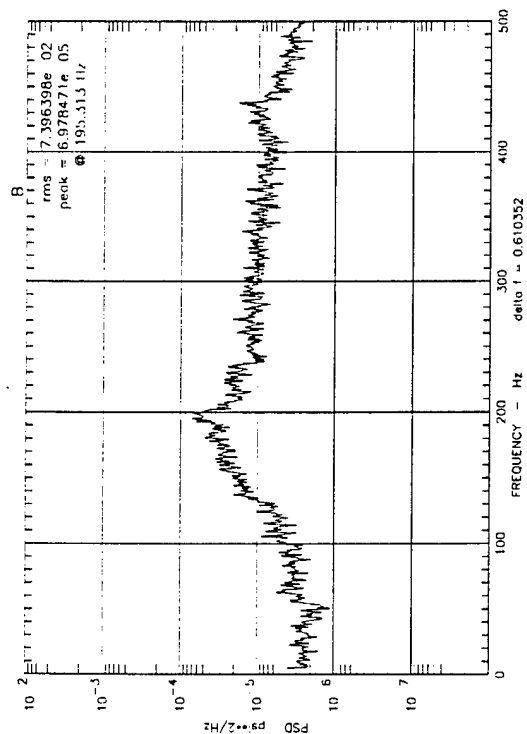


G -15 TPN 3110: q=56 alpha=24 beta=4 bp@n&w

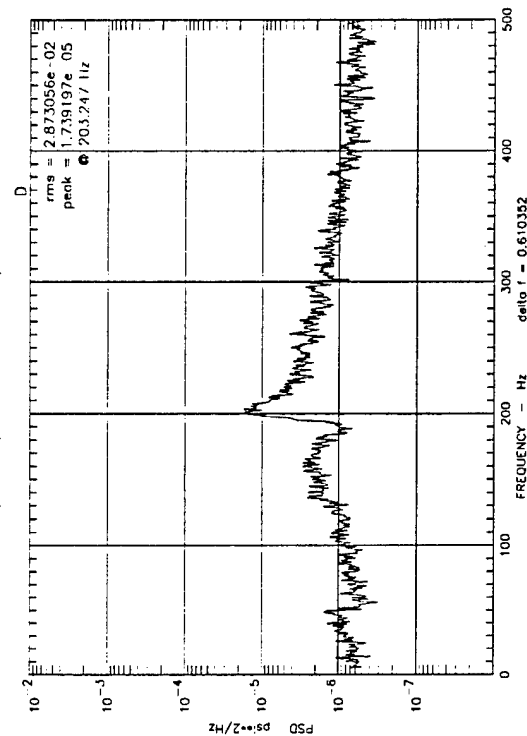




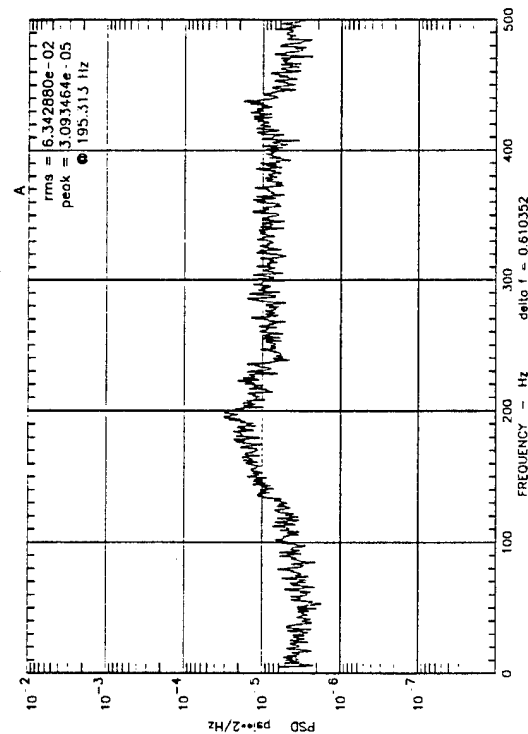
F-15 TPN\_3111: q=56 alpha=26 beta=4 bp@n&w



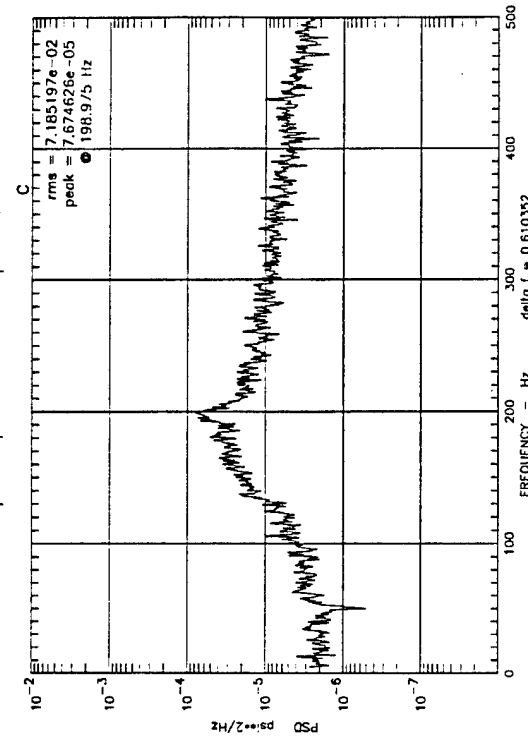
F-15 TPN\_3111: q=56 alpha=26 beta=4 bp@n&w



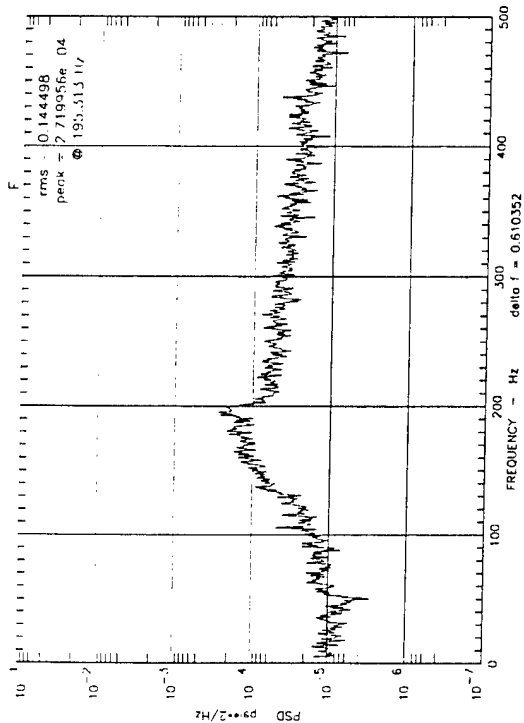
F-15 TPN\_3111: q=56 alpha=26 beta=4 bp@n&w



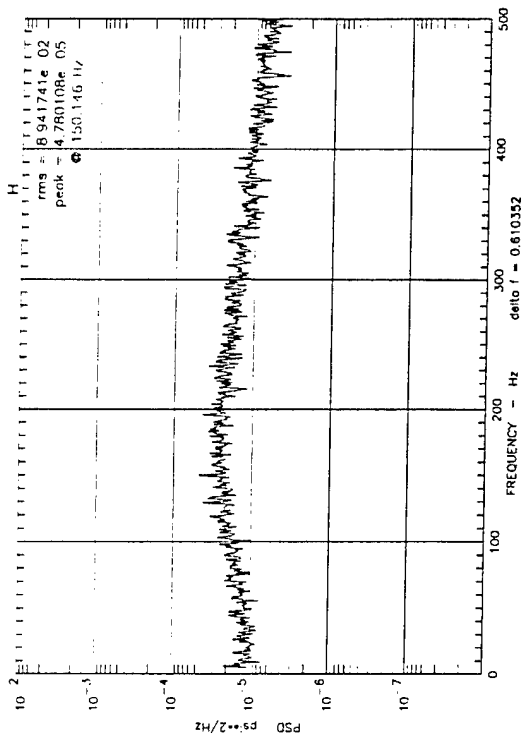
F-15 TPN\_3111: q=56 alpha=26 beta=4 bp@n&w



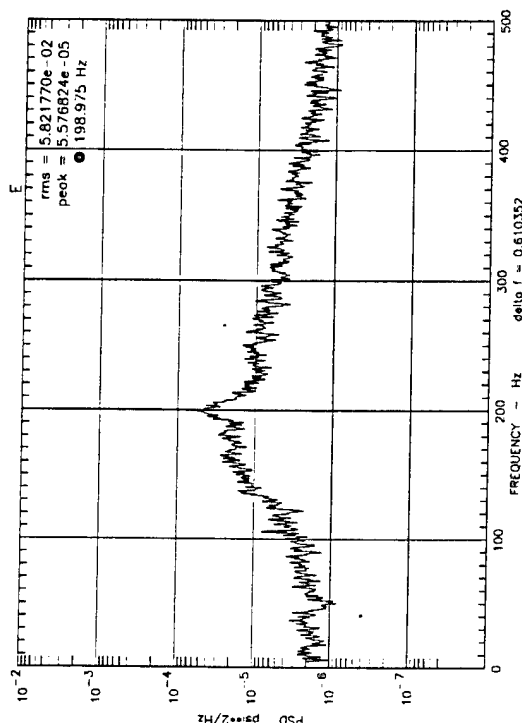
F-15 TPN 3111: q=56 alpha=26 beta=4 bp@n&w



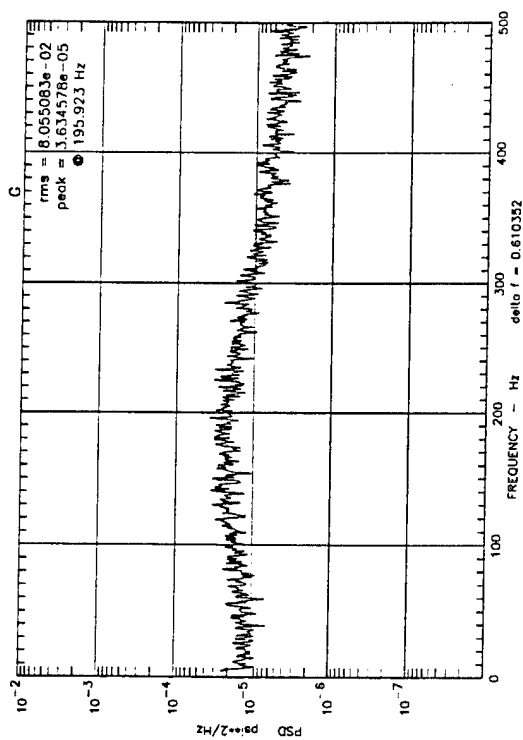
F-15 TPN 3111: q=56 alpha=26 beta=4 bp@n&w

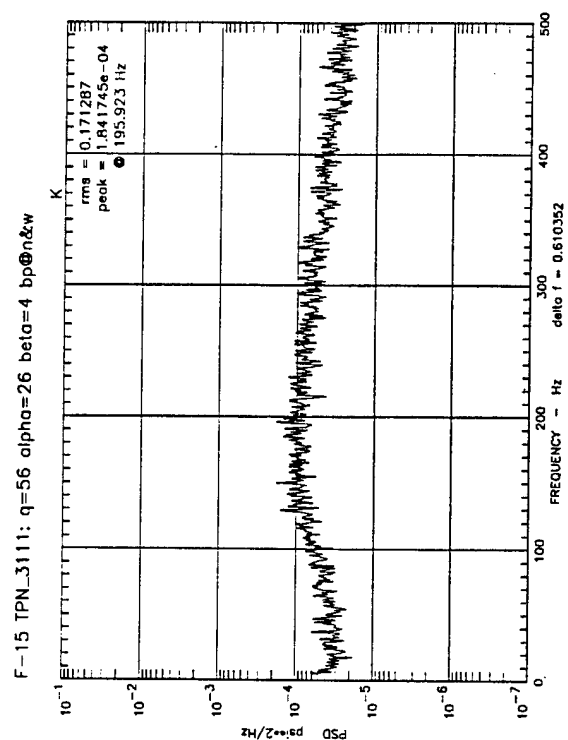
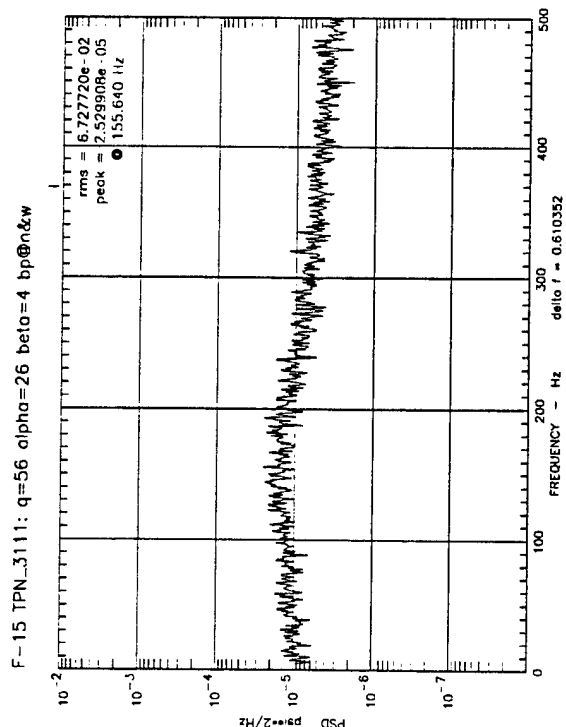
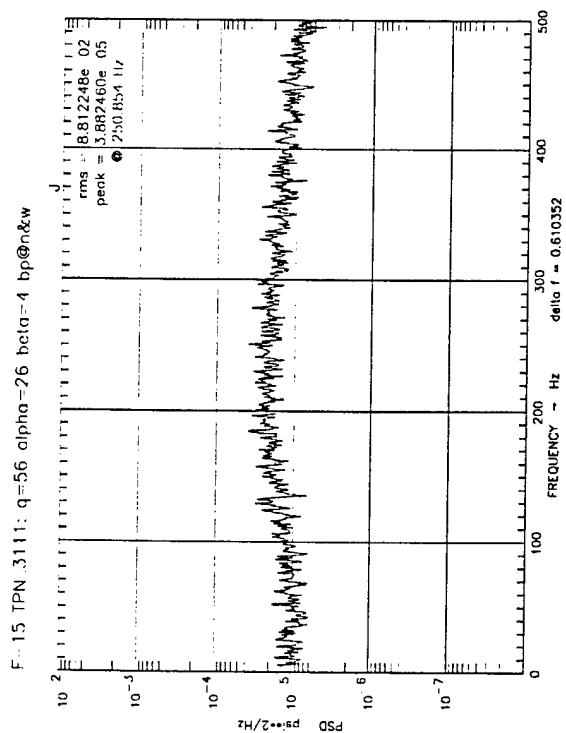


F-15 TPN 3111: q=56 alpha=26 beta=4 bp@n&w



F-15 TPN 3111: q=56 alpha=26 beta=4 bp@n&w





**PRESSURE PSD's**  
**Q=56 PSF**  
**2.1.3 RMS SUMMARY TABS AND GRAPHS**





F-15 Vertical Tail Buffet Test: Overall RMS of pressure data (psi, 5-500 Hz), Q=56 psf

45 psi blowing pressure:

Beta = 4:

Alpha:	Flexible					Rigid				
	A	B	C	D	E	F	G	H	I	K
8	.00208	.00151	.00130	.00115	.00103	.00193	.00567	.00792	.00793	.00652
16	.00502	.00391	.00351	.00165	.00219	.00477	.01428	.01614	.02790	.04915
20	.01493	.01642	.01542	.00573	.00960	.02148	.05408	.08721	.07355	.05491
24	.03828	.04711	.04245	.01632	.02953	.07570	.07762	.10130	.08120	.08502
28	.07867	.08933	.08961	.03903	.08282	.17970	.07906	.07827	.05807	.07450
32	.10430	.08839	.09419	.04923	.09765	.15190	.08161	.07755	.05860	.07414

Beta = 0:

Alpha:	Flexible					Rigid				
	A	B	C	D	E	F	G	H	I	K
8	.00210	.00142	.00132	.00108	.00091	.00222	.00506	.01233	.01089	.00673
16	.00651	.00587	.00518	.00214	.00397	.00687	.01012	.01063	.01308	.01019
20	.02829	.03154	.02613	.01146	.01847	.04139	.03728	.03809	.04584	.03065
24	.05274	.06417	.06056	.02640	.04771	.12310	.07808	.07237	.06585	.04925
28	.07402	.07747	.07730	.03749	.08114	.14470	.08620	.08939	.06077	.08280
32	.08464	.07480	.07883	.04163	.08154	.12620	.07993	.08040	.05470	.08332

Beta = -4:

Alpha:	Flexible					Rigid				
	A	B	C	D	E	F	G	H	I	K
8	.00215	.00149	.00131	.00114	.00096	.00210	.00563	.00786	.01119	.00971
16	.01124	.01041	.00986	.00422	.00661	.01821	.00681	.01240	.01253	.00659
20	.03952	.04533	.04244	.01785	.04018	.07805	.02072	.01663	.02511	.02164
24	.06777	.07452	.08192	.03433	.09134	.17630	.05751	.05083	.04898	.03767
28	.07451	.07131	.07653	.04124	.08432	.12840	.09918	.08251	.06908	.06829
32	.08976	.06577	.06293	.04106	.06609	.08957	.08889	.09301	.06170	.09286

F-15 Vertical Tail Buffet Test: Overall RMS of pressure data (psf, 5-500 Hz), Q=56 psf

65 psf blowing pressure:

Beta = 4:

Alpha:

8  
16  
20  
24  
28  
32

Flexible					Rigid					
A	B	C	D	E	F	G	H	I	J	K
xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
.00519	.00445	.00411	.00184	.00257	.00498	.01611	.01756	.03149	.04520	.02804
.01817	.02023	.01863	.00676	.01131	.02610	.05442	.08867	.07418	.05449	.14830
.04356	.05057	.04642	.01765	.03225	.08425	.08002	.10610	.08417	.09069	.20980
.07597	.08733	.08889	.03691	.08189	.18090	.08100	.07650	.05781	.07498	.12150
xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx

Beta = 0:

Alpha:

8  
16  
20  
24  
28  
32

Flexible						Rigid				
A	B	C	D	E	F	G	H	I	J	K
xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
.00762	.00726	.00648	.00264	.00493	.00784	.01037	.01095	.01457	.01060	.02007
.03284	.03760	.03096	.01334	.02175	.05082	.03866	.03762	.04637	.03090	.11170
.06145	.06997	.06578	.02786	.05345	.13450	.07664	.07190	.06593	.04861	.19870
.07935	.07967	.08437	.04213	.08909	.14840	.08847	.08722	.06371	.07991	.18450
xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx

Beta = -4:

Alpha:

8  
16  
20  
24  
28  
32

Flexible						Rigid				
A	B	C	D	E	F	G	H	I	J	K
xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx
.01380	.01295	.01228	.00506	.00828	.02199	.00656	.01316	.01251	.00656	.02888
.04178	.05138	.04844	.02124	.04674	.09143	.02150	.01947	.02669	.02068	.04708
.06502	.07504	.08071	.03427	.08904	.17210	.05590	.04979	.04749	.03807	.10220
.07752	.07071	.07666	.04102	.08566	.12990	.10250	.08007	.06797	.06582	.21870
xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx

**F-15 Vertical Tail Buffet Test: Overall RMS of pressure data (psi, 5-500 Hz), Q=56 psf**

65 psi blowing pressure at gun only:

**Beta = 4:**

Alpha:	Flexible					Rigid				
	A	B	C	D	E	F	G	H	I	K
16	.00499	.00463	.00420	.00185	.00253	.00411	.02143	.02286	.04525	.05462
20	.02129	.02356	.02137	.00761	.01299	.03061	.05958	.09007	.07380	.05925
24	.05338	.05138	.04596	.01775	.03097	.05234	.08190	.11440	.08949	.09868
26	.07074	.07348	.06784	.02801	.05302	.13560	.08730	.10450	.07961	.10040
										.19340

**Beta = 0:**

Alpha:	Flexible					Rigid				
	A	B	C	D	E	F	G	H	I	K
16	.00822	.00805	.00680	.00297	.00553	.00676	.01179	.01117	.01663	.01263
20	.03692	.04208	.03421	.01489	.02390	.05521	.04025	.04166	.04728	.03218
24	.06674	.07181	.06589	.02854	.05263	.13430	.07540	.08039	.06640	.04586
26	.07803	.08196	.08173	.03692	.07882	.16240	.08724	.08727	.07446	.06835
										.21060

**Beta = - 4:**

Alpha:	Flexible					Rigid				
	A	B	C	D	E	F	G	H	I	K
16	.01913	.01748	.01698	.00652	.00985	.02839	.00729	.01276	.01353	.00719
20	.04909	.05892	.05425	.02255	.05230	.10810	.02295	.01737	.02850	.02259
24	.07562	.08052	.08601	.03880	.09309	.17400	.05509	.04564	.04794	.03619
26	.07970	.08182	.09015	.04478	.10170	.16450	.08454	.06918	.05942	.04008
										.16720

F-15 Vertical Tail Buffet Test: Overall RMS of pressure data (psi, 5-500 Hz), Q=56 psf

65 psi blowing pressure at gun & wing L.E.:

Beta = 4:

Alpha:	Flexible					Rigid					
	A	B	C	D	E	F	G	H	I	J	K
16	.00570	.00510	.00464	.00198	.00290	.00538	.02165	.02453	.04505	.04765	.03621
20	.01990	.02221	.02062	.00733	.01265	.03040	.05859	.09139	.07477	.05649	.15470
24	.04571	.04930	.04534	.01718	.03180	.08196	.08174	.11640	.09284	.09763	.21590
26	.06673	.06865	.06427	.02600	.05017	.12760	.08575	.10640	.08132	.10260	.20160

Beta = 0:

Alpha:	Flexible					Rigid					
	A	B	C	D	E	F	G	H	I	J	K
16	.00825	.00809	.00719	.00290	.00559	.00782	.01200	.01151	.01677	.01220	.02444
20	.03280	.03907	.03286	.01422	.02329	.05451	.03988	.03932	.04742	.03082	.11680
24	.06266	.06989	.06677	.02798	.05479	.13780	.07600	.07691	.06539	.04548	.20500
26	.07214	.07880	.07868	.03454	.07464	.16320	.08713	.08804	.07811	.06875	.20930

Beta = - 4:

Alpha:	Flexible					Rigid					
	A	B	C	D	E	F	G	H	I	J	K
16	.01697	.01603	.01459	.00595	.00918	.02655	.00786	.01213	.01302	.00703	.02787
20	.04441	.05617	.05292	.02234	.05232	.10460	.02548	.02085	.02893	.02485	.04719
24	.07102	.08066	.08474	.03613	.09223	.17830	.05711	.04853	.04643	.03558	.10300
26	.07477	.08609	.09491	.04357	.10380	.18260	.08265	.06484	.05778	.04003	.16520

F-15 Vertical Tail Buffet Test: Overall RMS of pressure data (psi, 5-500 Hz), Q=56 psf

87 psi blowing pressure at nose only:

Beta = 4:

Alpha:	Flexible					Rigid				
	A	B	C	D	E	F	G	H	I	K
16	.00459	.00409	.00403	.00176	.00267	.00513	.01631	.01612	.02903	.04856
20	.01876	.02076	.01894	.00713	.01158	.02924	.05614	.08840	.07271	.05619
24	.04891	.05592	.05015	.01963	.03545	.09553	.07888	.10230	.07951	.08781
26	.06964	.08083	.07848	.03161	.06441	.16000	.08065	.08647	.06543	.08578

Beta = 0:

Alpha:	Flexible					Rigid				
	A	B	C	D	E	F	G	H	I	K
16	.00683	.00652	.00548	.00249	.00460	.00544	.00989	.01092	.01449	.01094
20	.03536	.04003	.03254	.01427	.02238	.05189	.03688	.03935	.04548	.03132
24	.06507	.07082	.06627	.02910	.05490	.13580	.07814	.07548	.06729	.05049
26	.07644	.07837	.07861	.03653	.07872	.15050	.08717	.08056	.06715	.06898

Beta = - 4:

Alpha:	Flexible					Rigid				
	A	B	C	D	E	F	G	H	I	K
16	.01154	.01049	.01052	.00406	.00620	.01720	.00684	.01212	.01377	.00781
20	.04749	.05641	.05187	.02191	.04778	.10070	.02072	.01641	.02442	.02131
24	.07286	.07563	.08104	.03849	.08991	.15990	.05853	.05006	.05010	.03788
26	.07767	.07241	.08185	.04144	.09258	.13990	.09099	.07817	.06543	.04722



F-15 Vertical Tail Buffet Test: Overall RMS of pressure data (psi, 5-500 Hz), Q=56 psf

87 psi blowing pressure at nose & 65 psi at wing L.E.:

Beta = 4:

Alpha:	Flexible						Rigid			
	A	B	C	D	E	F	G	H	I	K
16	.00550	.00481	.00462	.00199	.00301	.00660	.01646	.01853	.03190	.04527
20	.01940	.02139	.01969	.00732	.01210	.02995	.05456	.09010	.07509	.05386
24	.04721	.05379	.04883	.01893	.03490	.09063	.08035	.10390	.08296	.08703
26	.06343	.07396	.07185	.02873	.05822	.14450	.08055	.08942	.06728	.08812

Beta = 0:

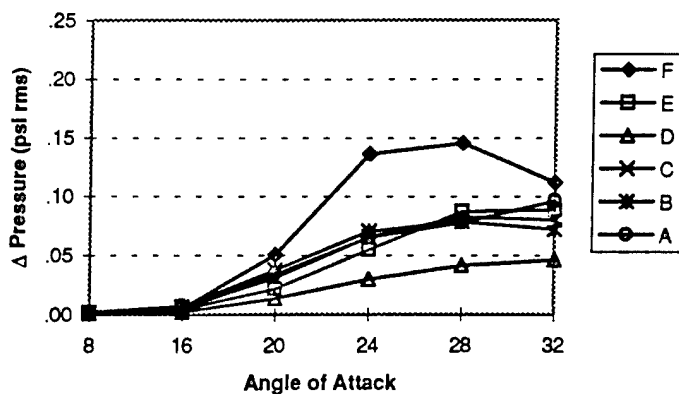
Alpha:	Flexible						Rigid			
	A	B	C	D	E	F	G	H	I	K
16	.00763	.00734	.00654	.00266	.00499	.00806	.01073	.01106	.01497	.01158
20	.03416	.03939	.03273	.01424	.02297	.05461	.03923	.03842	.04675	.03136
24	.06259	.06999	.06600	.02833	.05393	.13530	.07873	.07279	.06699	.05008
26	.07402	.07688	.07720	.03553	.07467	.15290	.08637	.08104	.06883	.06940

Beta = - 4:

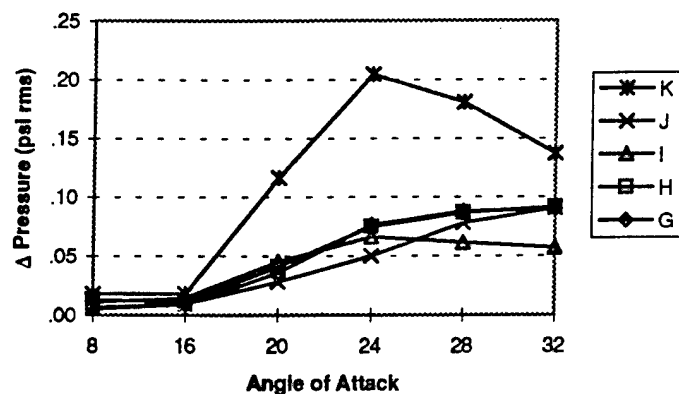
Alpha:	Flexible						Rigid			
	A	B	C	D	E	F	G	H	I	K
16	.01351	.01283	.01200	.00505	.00793	.02172	.00754	.01346	.01368	.00720
20	.04147	.05006	.04693	.02024	.04355	.08842	.02299	.01817	.02529	.02387
24	.06653	.07592	.08077	.03488	.08855	.17190	.05957	.05226	.04956	.03870
26	.07057	.07542	.08052	.03804	.09055	.15770	.09211	.07162	.06540	.04760

# F-15 Vertical Tail Buffet Test

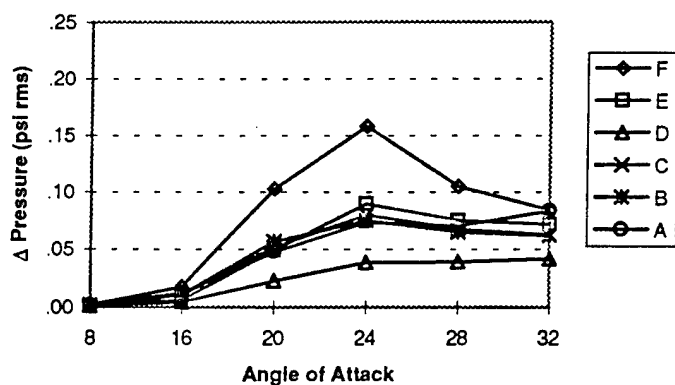
Flex Tail:  $Q=56$  psf,  $\beta=0$   
0 psi blowing @ wing L.E.



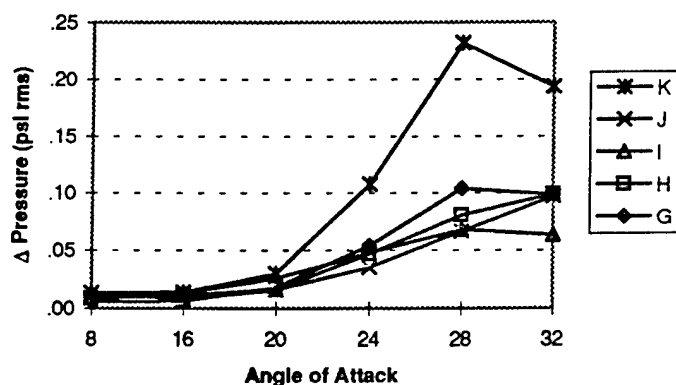
Rigid Tail:  $Q=56$  psf,  $\beta=0$   
0 psi blowing @ wing L.E.



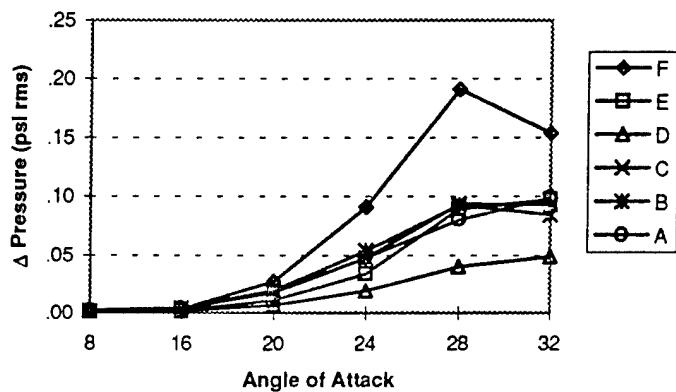
Flex Tail:  $Q=56$  psf,  $\beta=-4$   
0 psi blowing @ wing L.E.



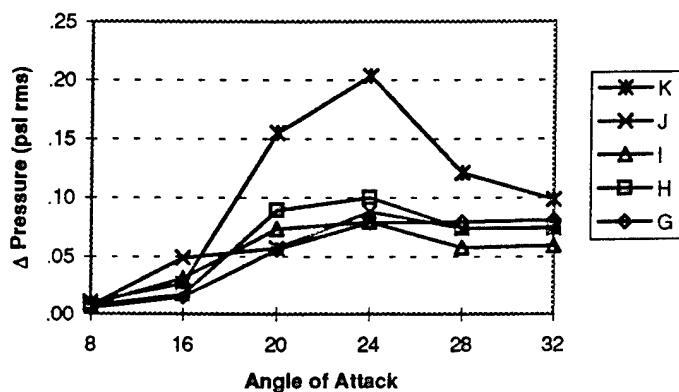
Rigid Tail:  $Q=56$  psf,  $\beta=-4$   
0 psi blowing @ wing L.E.



Flex Tail:  $Q=56$  psf,  $\beta=4$   
0 psi blowing @ wing L.E.



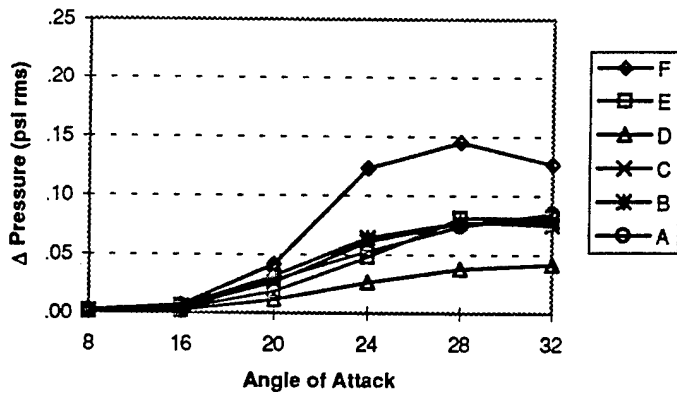
Rigid Tail:  $Q=56$  psf,  $\beta=4$   
0 psi blowing @ wing L.E.



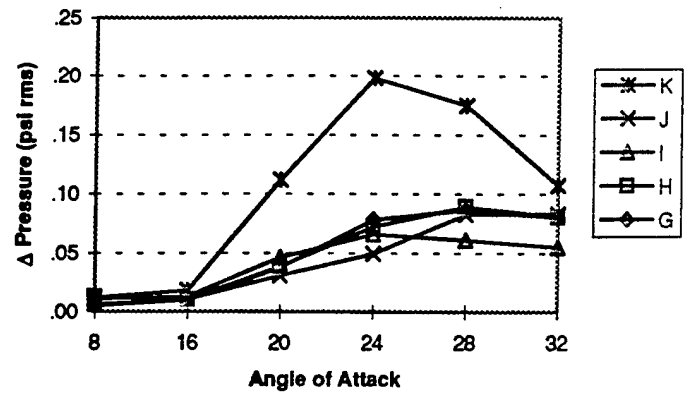


# F-15 Vertical Tail Buffet Test

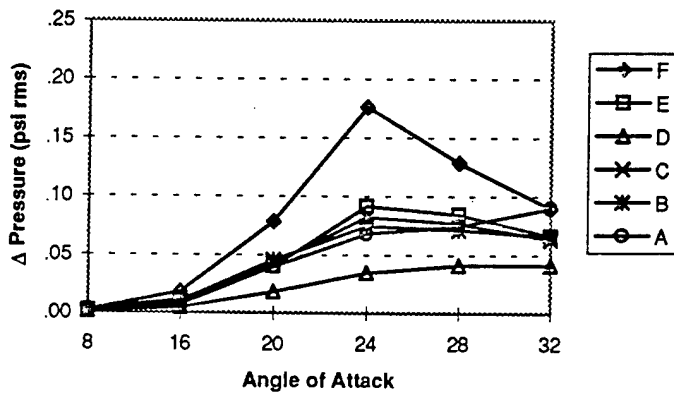
Flex Tail:  $Q=56$  psf,  $\text{Beta}=0$   
45 psi blowing @ wing L.E.



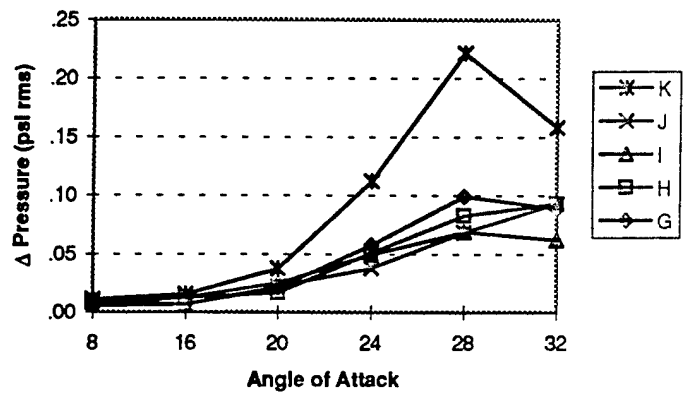
Rigid Tail:  $Q=56$  psf,  $\text{Beta}=0$   
45 psi blowing @ wing L.E.



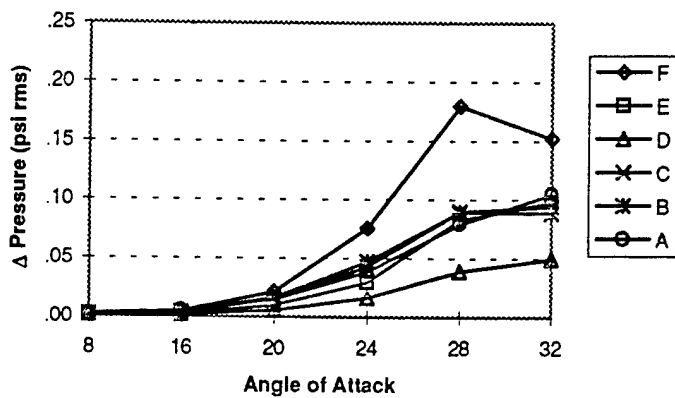
Flex Tail:  $Q=56$  psf,  $\text{Beta}=-4$   
45 psi blowing @ wing L.E.



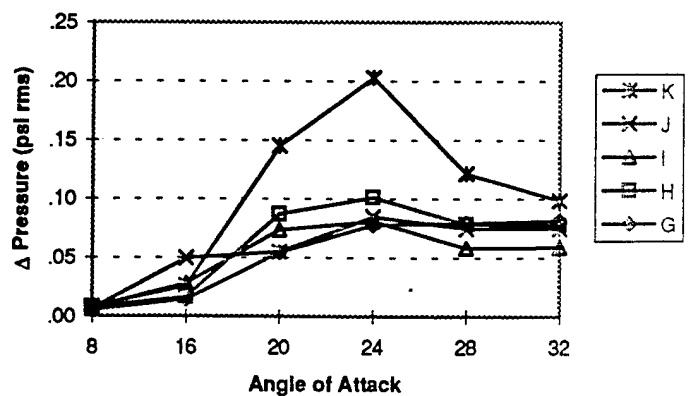
Rigid Tail:  $Q=56$  psf,  $\text{Beta}=-4$   
45 psi blowing @ wing L.E.



Flex Tail:  $Q=56$  psf,  $\text{Beta}=4$   
45 psi blowing @ wing L.E.

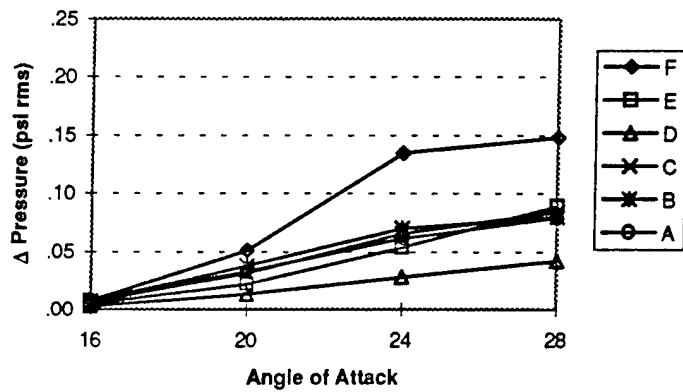


Rigid Tail:  $Q=56$  psf,  $\text{Beta}=4$   
45 psi blowing @ wing L.E.

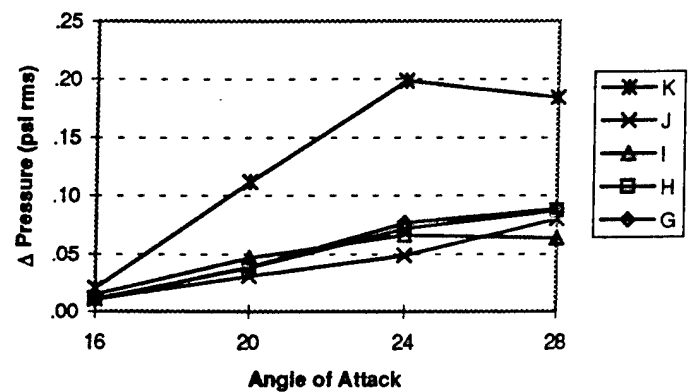


# F-15 Vertical Tail Buffet Test

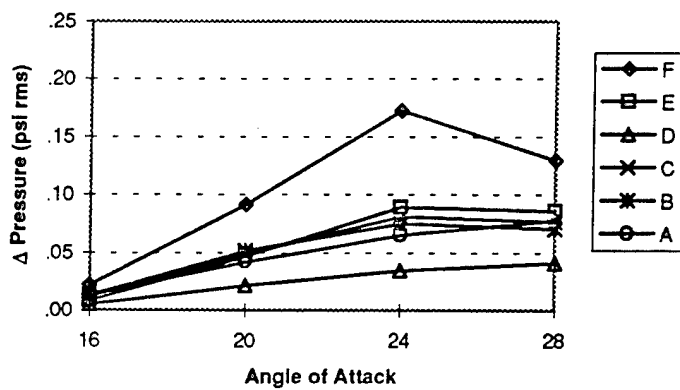
Flex Tail:  $Q=56$  psf,  $\beta=0$   
65 psi blowing @ wing L.E.



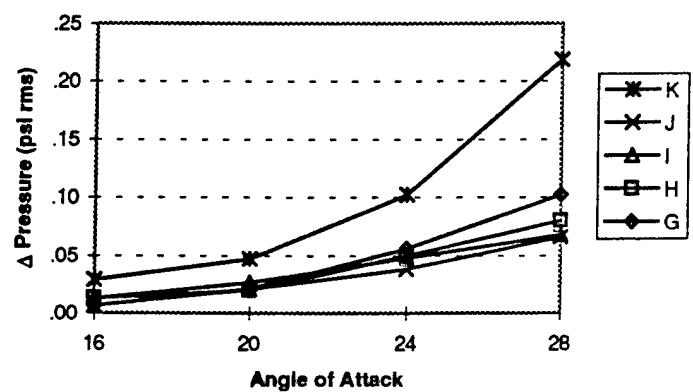
Rigid Tail:  $Q=56$  psf,  $\beta=0$   
65 psi blowing @ wing L.E.



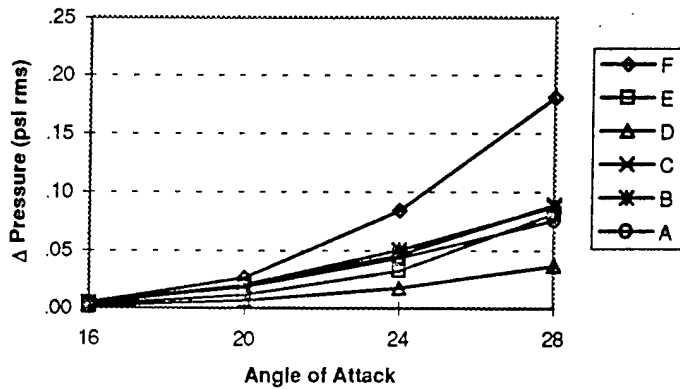
Flex Tail:  $Q=56$  psf,  $\beta=-4$   
65 psi blowing @ wing L.E.



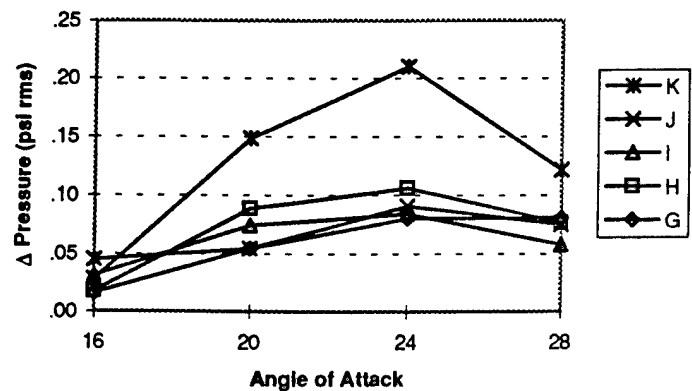
Rigid Tail:  $Q=56$  psf,  $\beta=-4$   
65 psi blowing @ wing L.E.



Flex Tail:  $Q=56$  psf,  $\beta=4$   
65 psi blowing @ wing L.E.

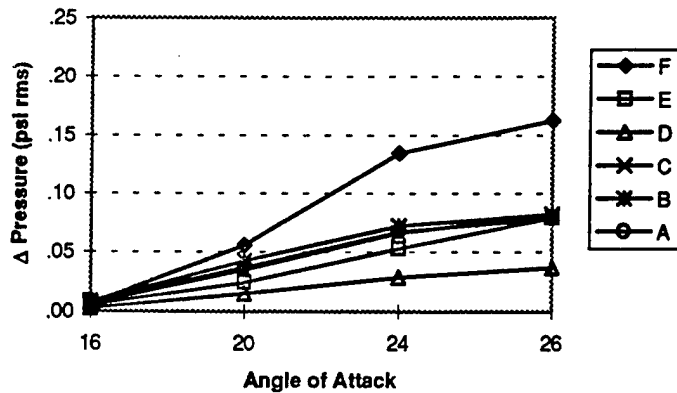


Rigid Tail:  $Q=56$  psf,  $\beta=4$   
65 psi blowing @ wing L.E.

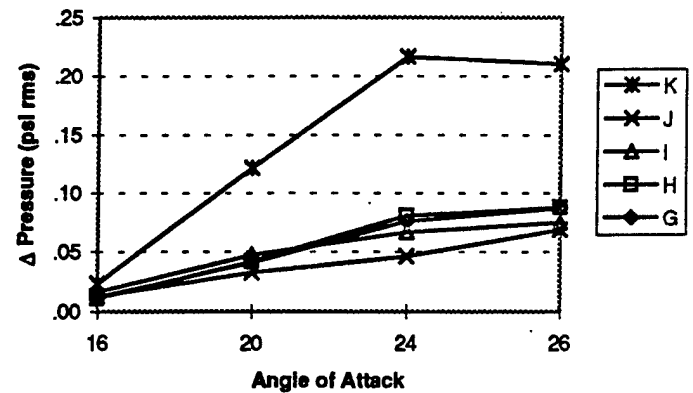


# F-15 Vertical Tail Buffet Test

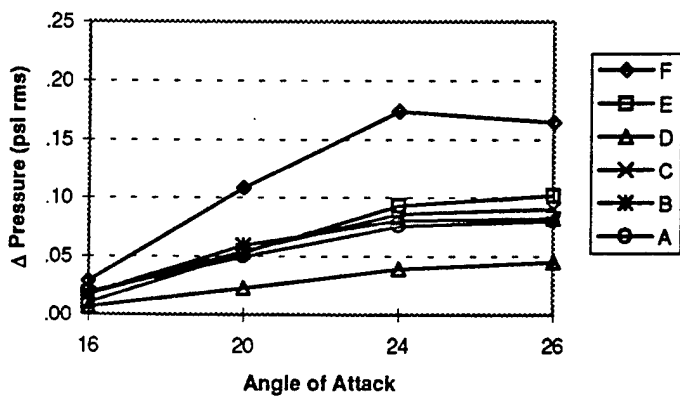
Flex Tail: Q=56 psf, Beta=0  
65 psi blowing @ gun only



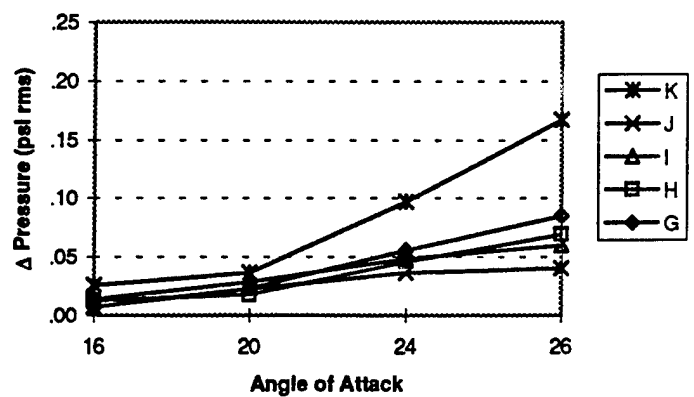
Rigid Tail: Q=56 psf, Beta=0  
65 psi blowing @ gun only



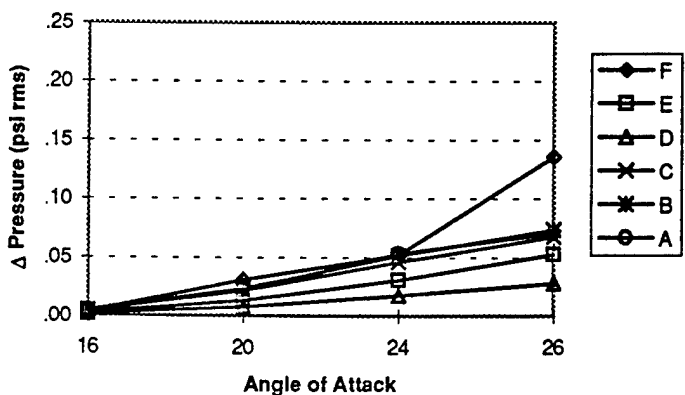
Flex Tail: Q=56 psf, Beta=-4  
65 psi blowing @ gun only



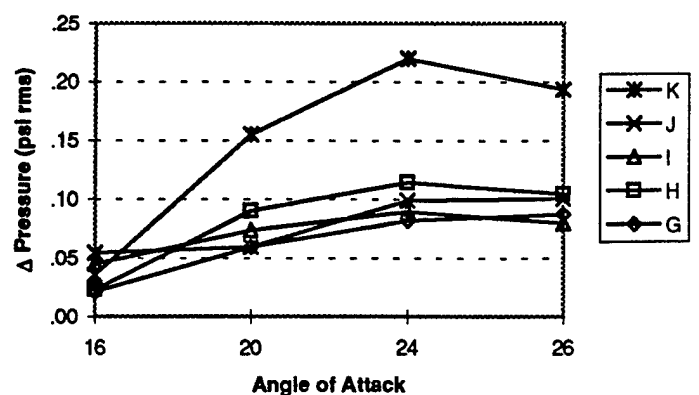
Rigid Tail: Q=56 psf, Beta=-4  
65 psi blowing @ gun only



Flex Tail: Q=56 psf, Beta=4  
65 psi blowing @ gun only

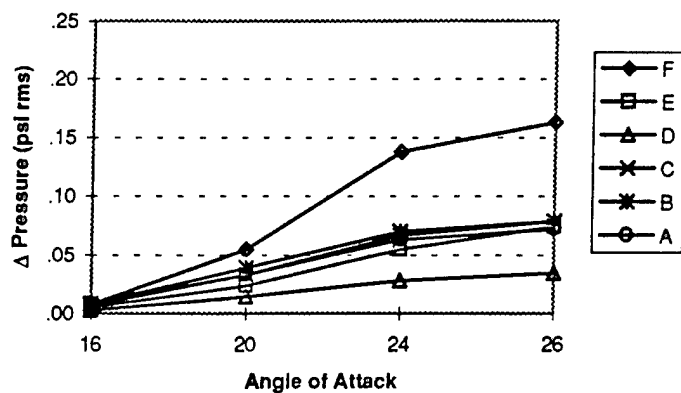


Rigid Tail: Q=56 psf, Beta=4  
65 psi blowing @ gun only

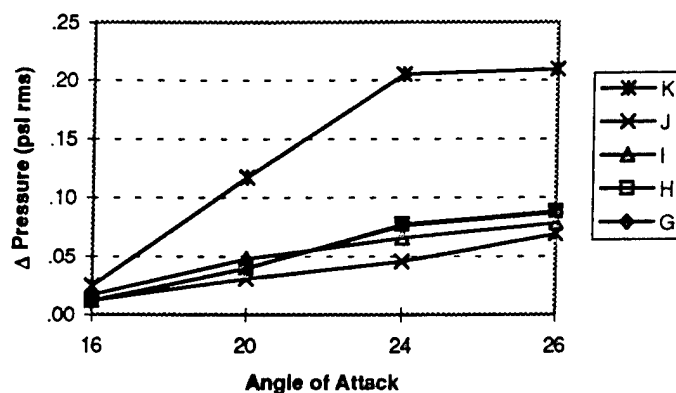


# F-15 Vertical Tail Buffet Test

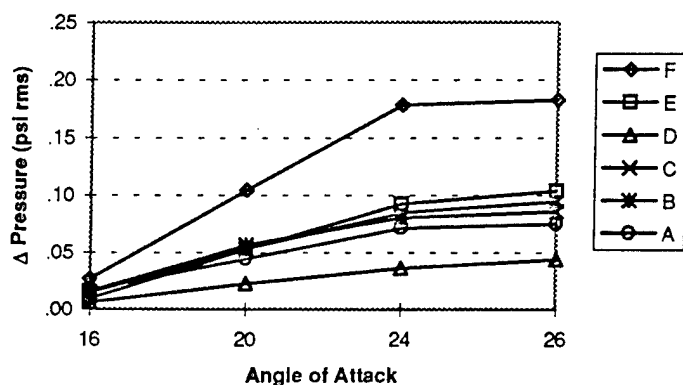
Flex Tail: Q=56 psf, Beta=0  
65 psi blowing @ gun & wing L.E.



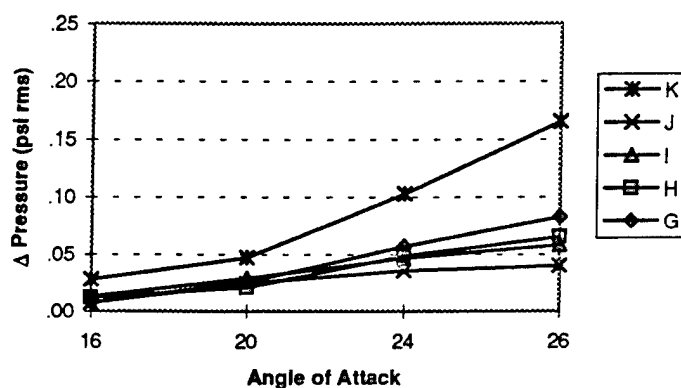
Rigid Tail: Q=56 psf, Beta=0  
65 psi blowing @ gun & wing L.E.



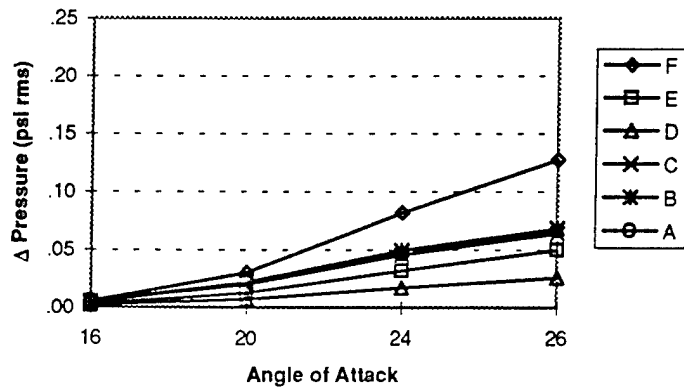
Flex Tail: Q=56 psf, Beta=-4  
65 psi blowing @ gun & wing L.E.



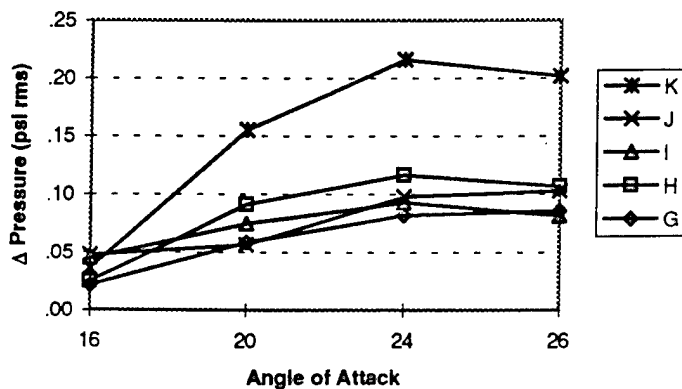
Rigid Tail: Q=56 psf, Beta=-4  
65 psi blowing @ gun & wing L.E.



Flex Tail: Q=56 psf, Beta=4  
65 psi blowing @ gun & wing L.E.

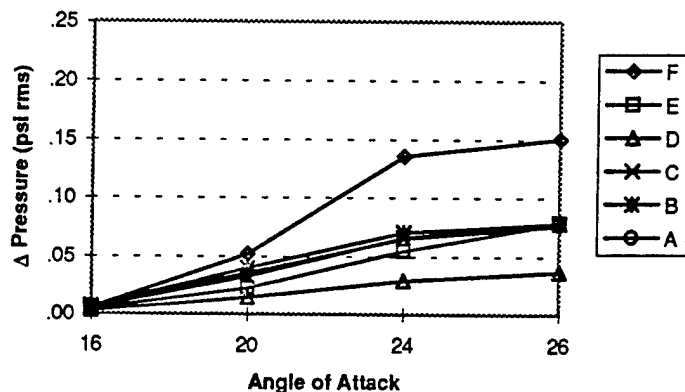


Rigid Tail: Q=56 psf, Beta=4  
65 psi blowing @ gun & wing L.E.

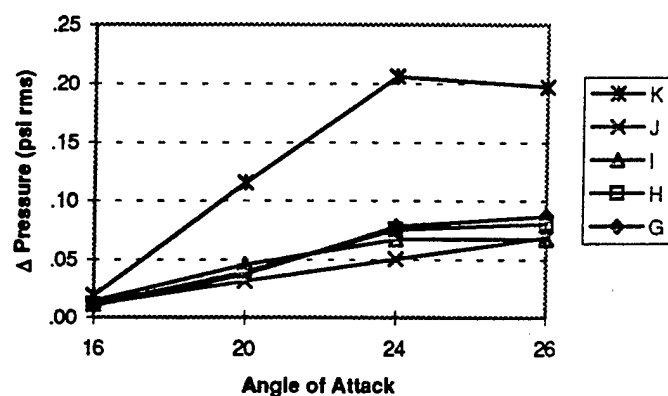


# F-15 Vertical Tail Buffet Test

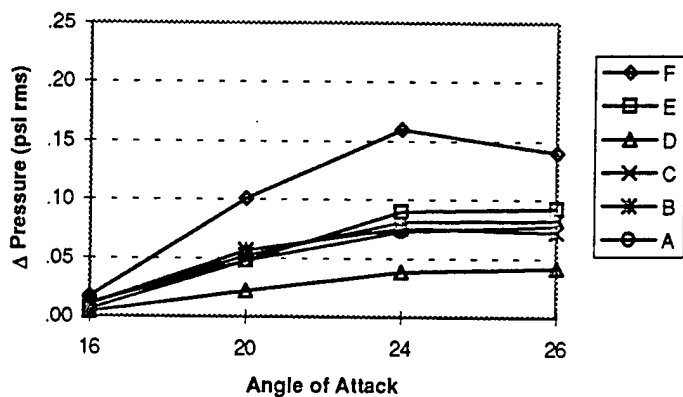
**Flex Tail: Q=56 psf, Beta=0**  
87 psi blowing at nose only



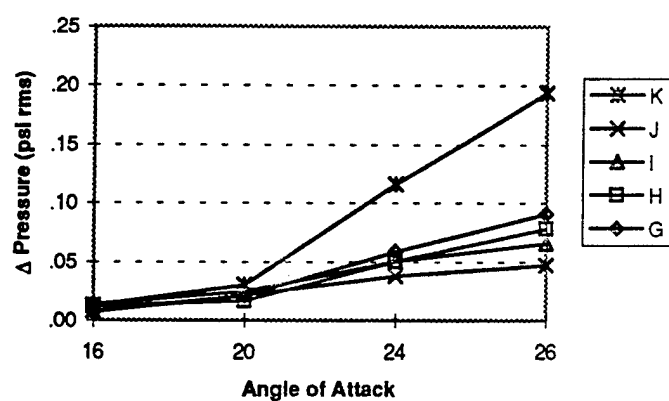
**Rigid Tail: Q=56 psf, Beta=0**  
87 psi blowing at nose only



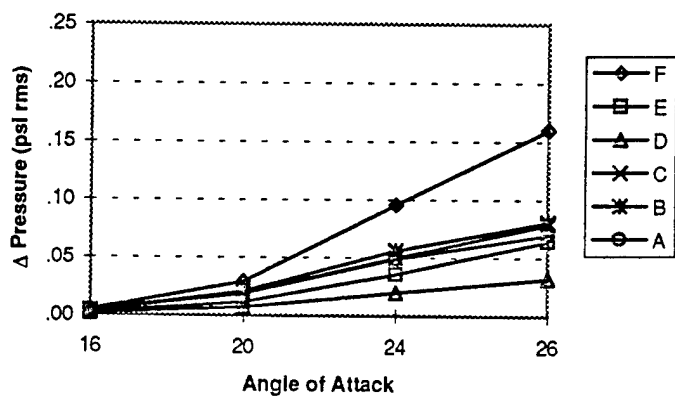
**Flex Tail: Q=56 psf, Beta=-4**  
87 psi blowing at nose only



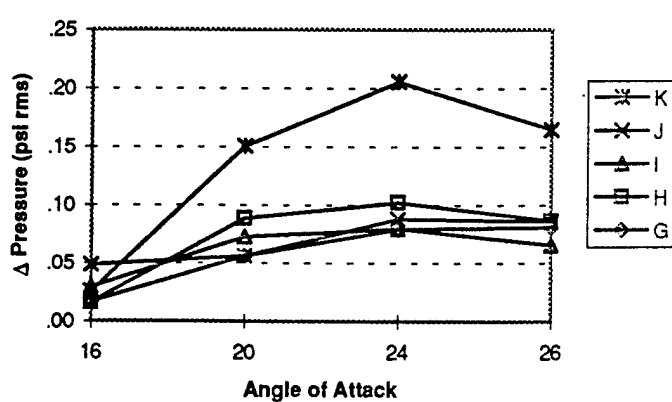
**Rigid Tail: Q=56 psf, Beta=-4**  
87 psi blowing at nose only



**Flex Tail: Q=56 psf, Beta=4**  
87 psi blowing at nose only

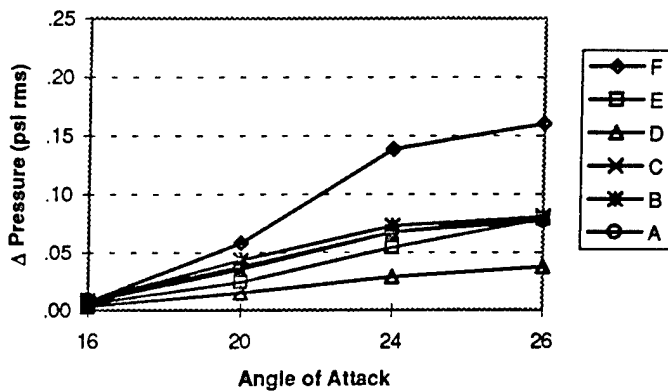


**Rigid Tail: Q=56 psf, Beta=4**  
87 psi blowing at nose only

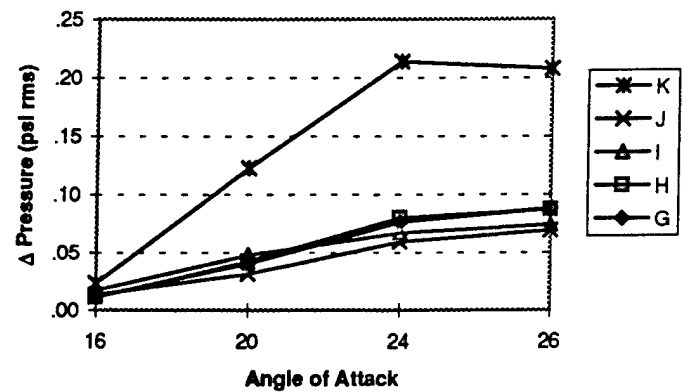


# F-15 Vertical Tail Buffet Test

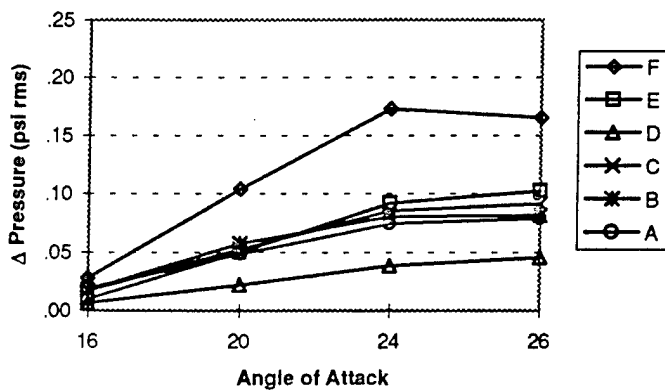
**Flex Tail:  $Q=56$  psf,  $\beta=0$**   
87 psi blowing at nose & 65 psi at gun



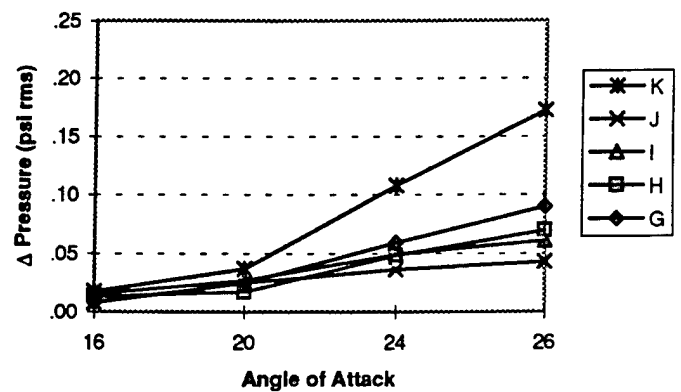
**Rigid Tail:  $Q=56$  psf,  $\beta=0$**   
87 psi blowing at nose & 65 psi at gun



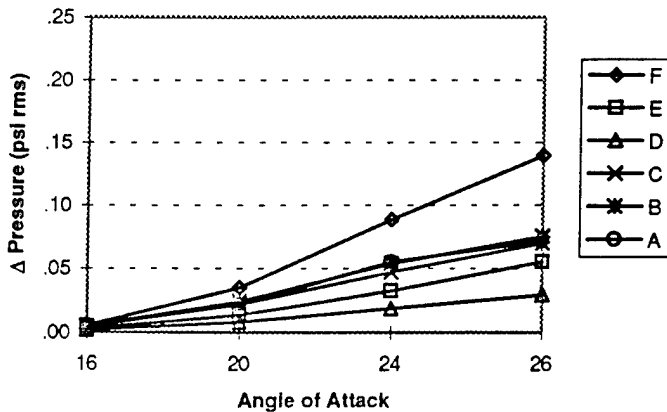
**Flex Tail:  $Q=56$  psf,  $\beta=-4$**   
87 psi blowing at nose & 65 psi at gun



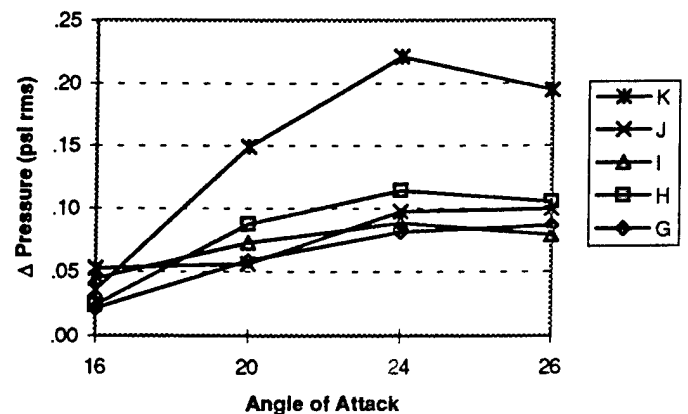
**Rigid Tail:  $Q=56$  psf,  $\beta=-4$**   
87 psi blowing at nose & 65 psi at gun



**Flex Tail:  $Q=56$  psf,  $\beta=4$**   
87 psi blowing at nose & 65 psi at gun

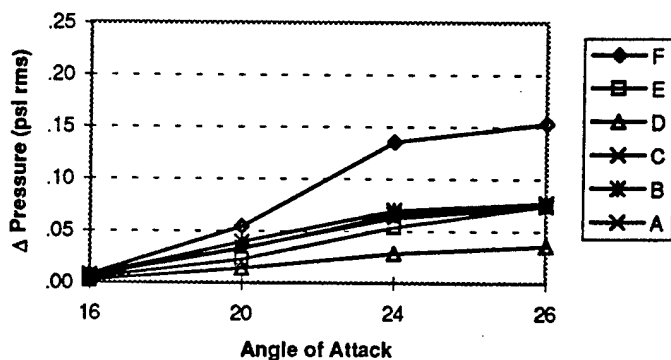


**Rigid Tail:  $Q=56$  psf,  $\beta=4$**   
87 psi blowing at nose & 65 psi at gun

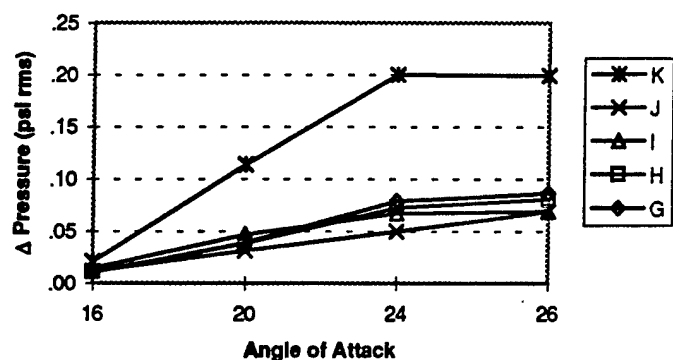


# F-15 Vertical Tail Buffet Test

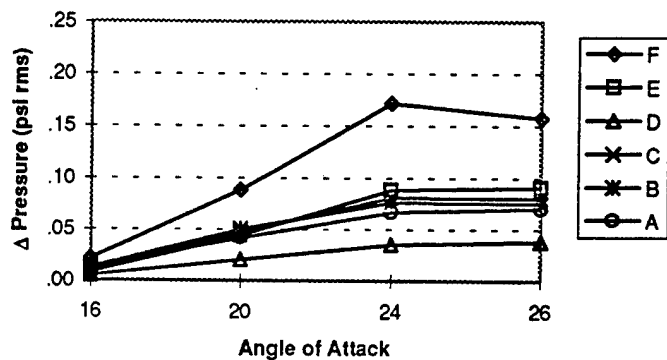
Flex Tail:  $Q=56$  psf,  $\text{Beta}=0$   
87 psi blowing at nose &  
65 psi at wing L.E.



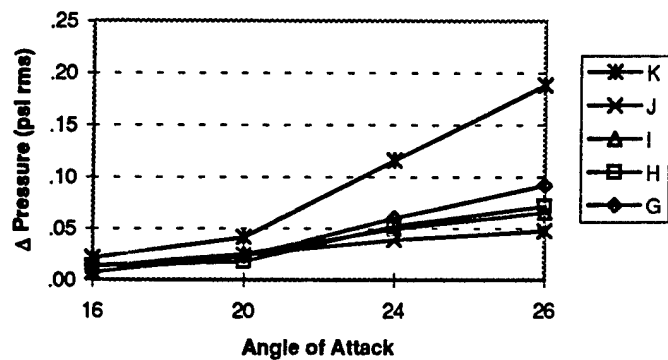
Rigid Tail:  $Q=56$  psf,  $\text{Beta}=0$   
87 psi blowing at nose &  
65 psi at wing L.E.



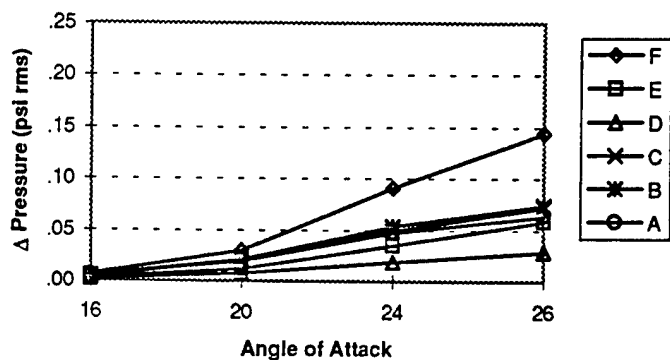
Flex Tail:  $Q=56$  psf,  $\text{Beta}=-4$   
87 psi blowing at nose &  
65 psi at wing L.E.



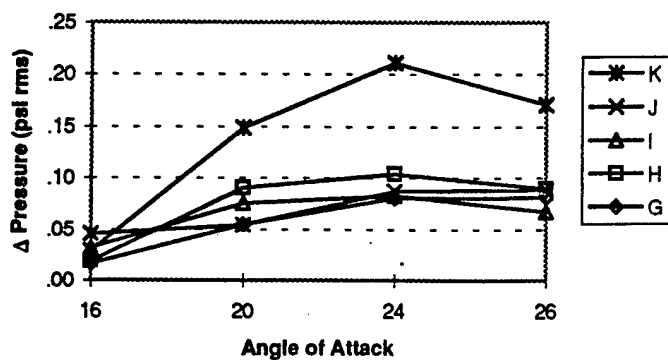
Rigid Tail:  $Q=56$  psf,  $\text{Beta}=-4$   
87 psi blowing at nose &  
65 psi at wing L.E.



Flex Tail:  $Q=56$  psf,  $\text{Beta}=4$   
87 psi blowing at nose &  
65 psi at wing L.E.



Rigid Tail:  $Q=56$  psf,  $\text{Beta}=4$   
87 psi blowing at nose &  
65 psi at wing L.E.



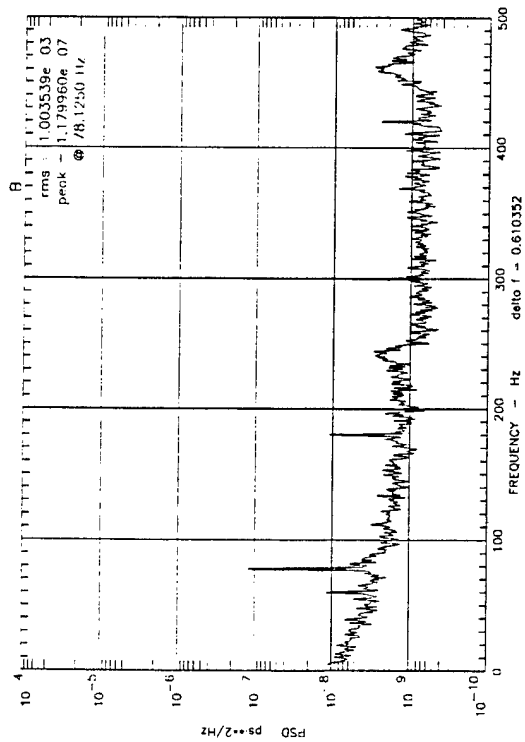
**PRESSURE PSD's**

**Q= 30 PSF**

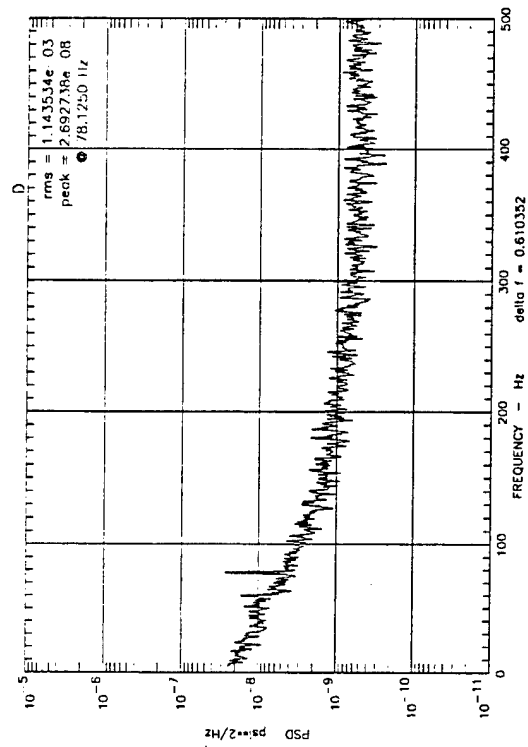
**2.2.1.1 PSD GRAPHS ( 5- 500 HZ), WBP=0, BETA =0, -4, +4 DEG,  
ALPHA 8.....32 DEG**



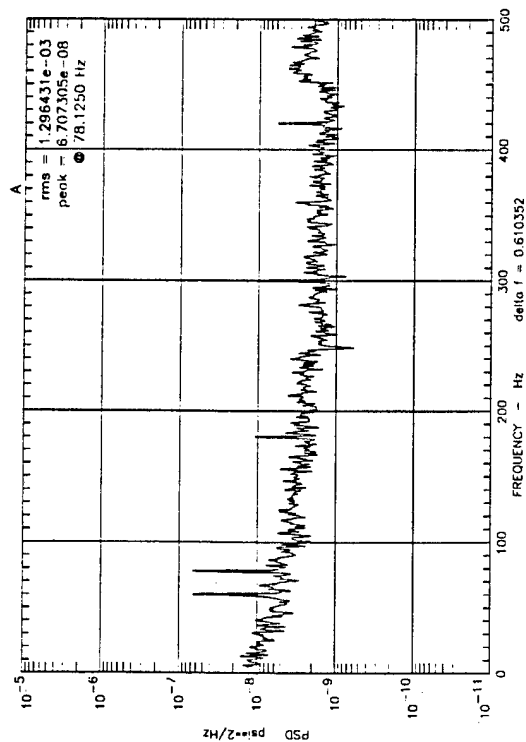
F-15 TPN 3261; q=30 alpha=8 beta=4 bp=0



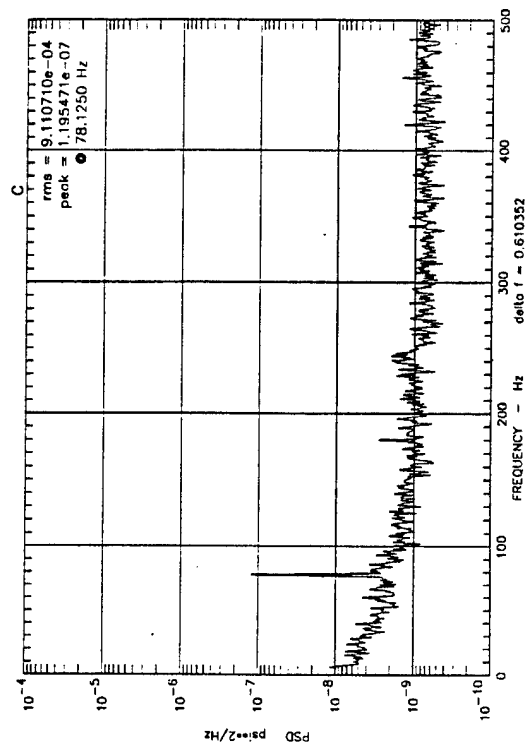
F-15 TPN 3261; q=30 alpha=8 beta=4 bp=0



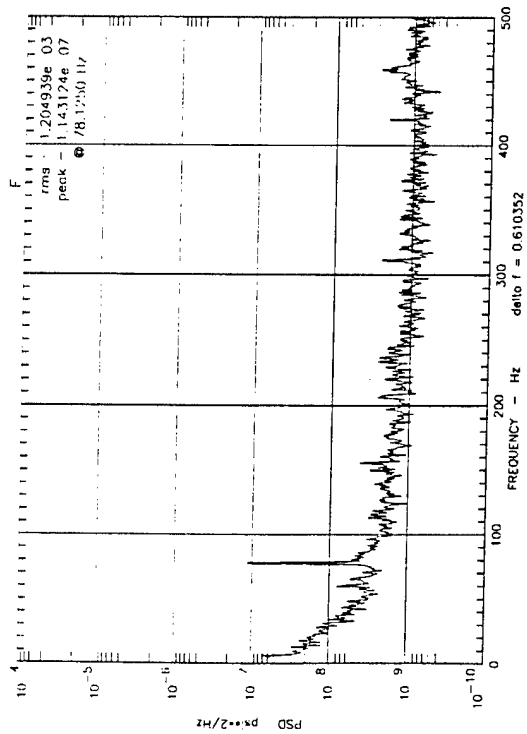
F-15 TPN 3261; q=30 alpha=8 beta=4 bp=0



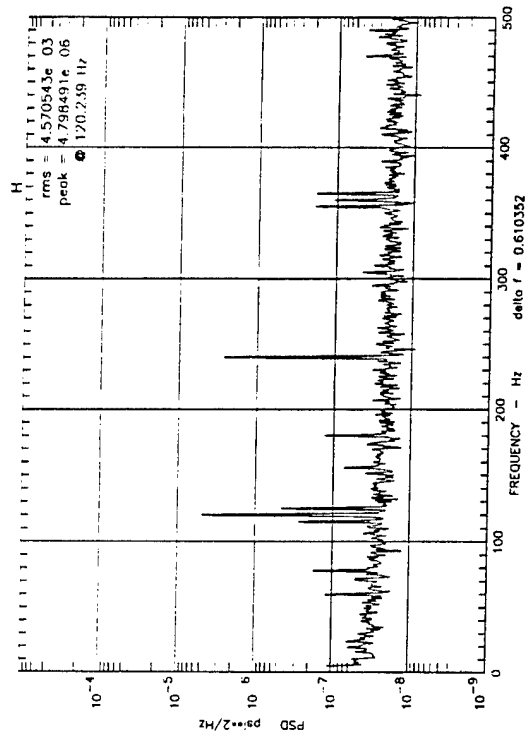
F-15 TPN 3261; q=30 alpha=8 beta=4 bp=0



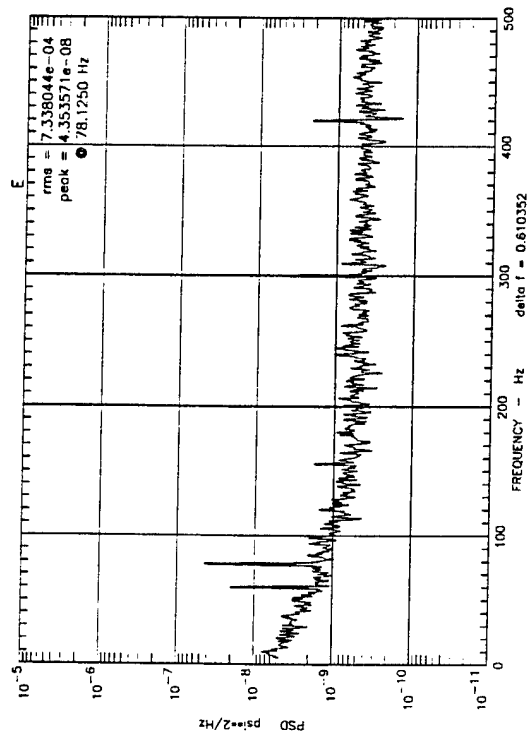
F-15 TPN\_3261: q=30 alpha=8 beta=4 bp=0



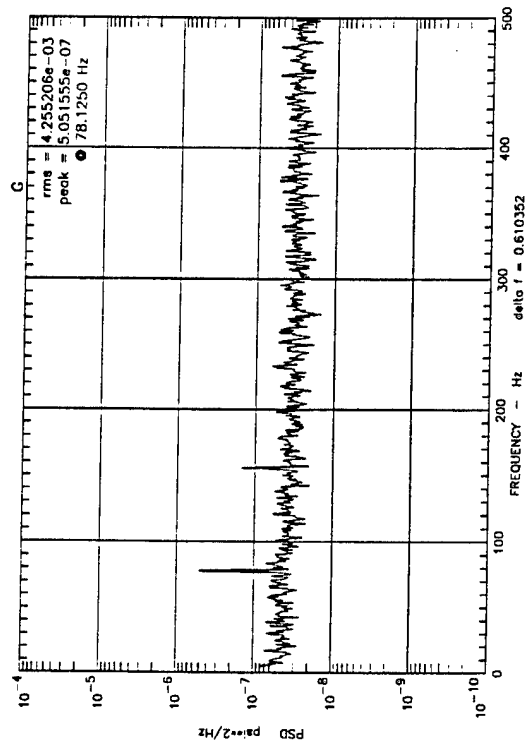
F-15 TPN\_3261: q=30 alpha=8 beta=4 bp=0

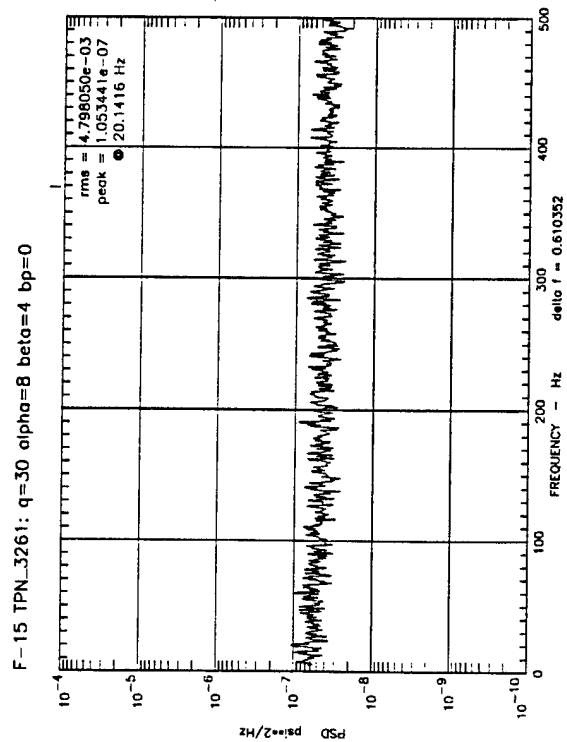
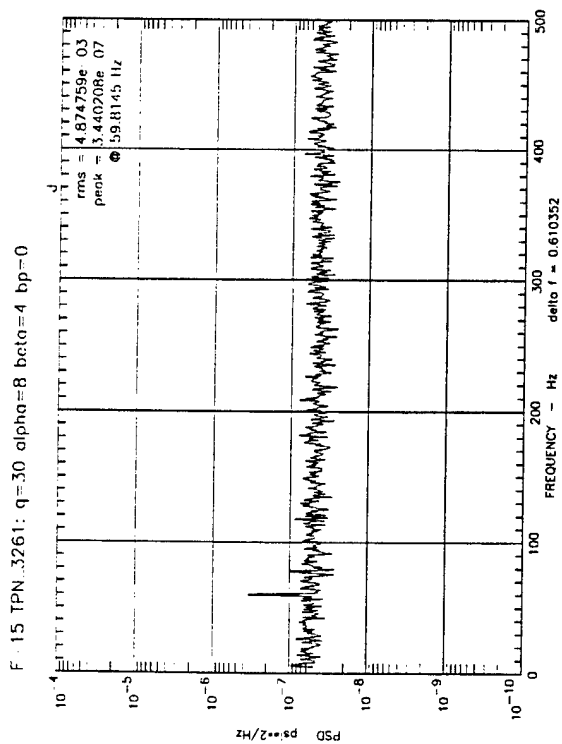


F-15 TPN\_3261: q=30 alpha=8 beta=4 bp=0

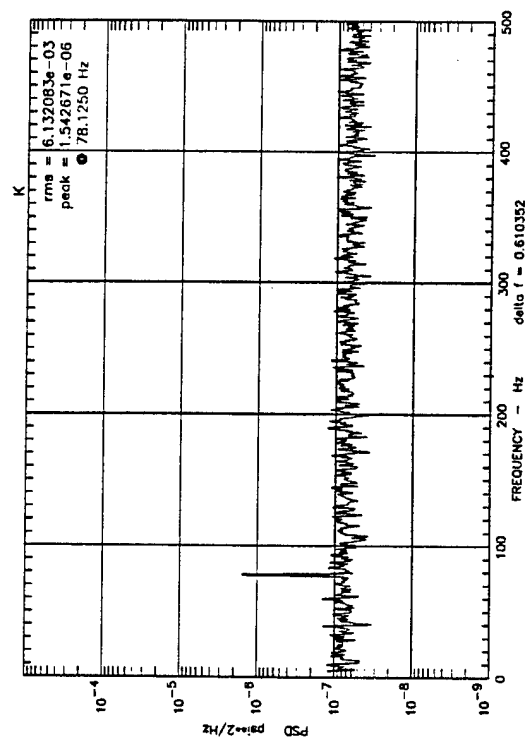


F-15 TPN\_3261: q=30 alpha=8 beta=4 bp=0

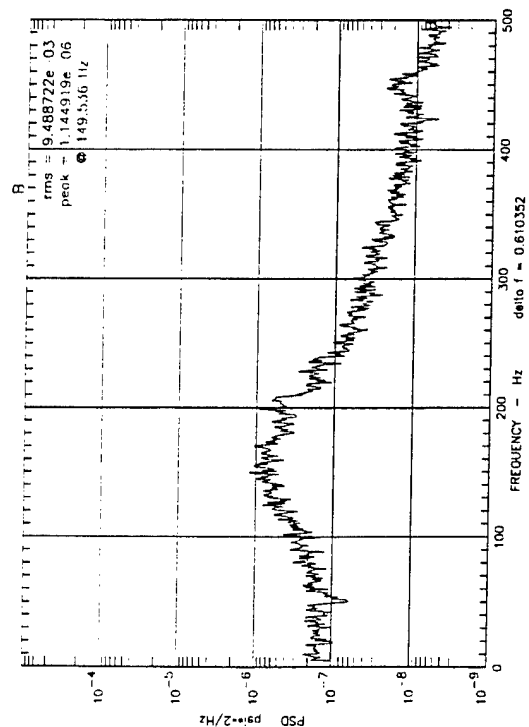




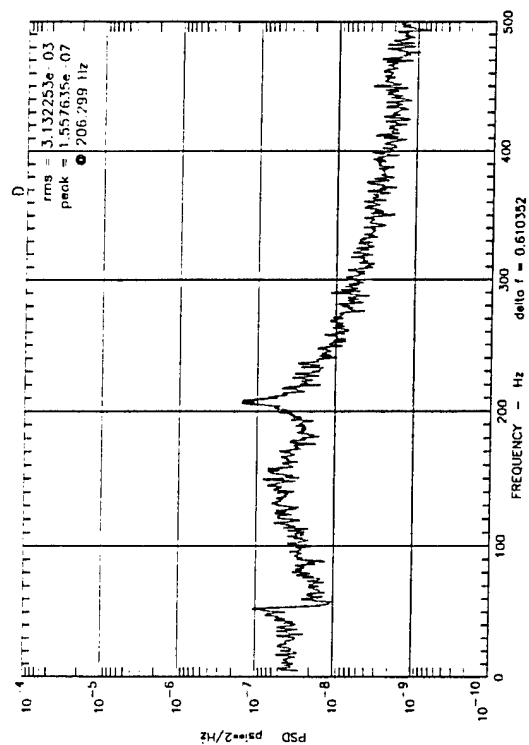
F-15 TPN\_3261: q=30 alpha=8 beta=4 bp=0



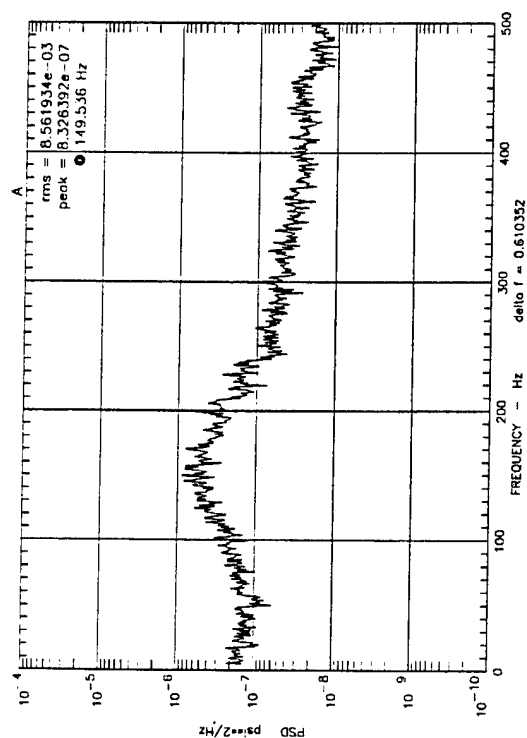
F 15 TPN 3267: q=30 alpha=20 beta=4 bp=0



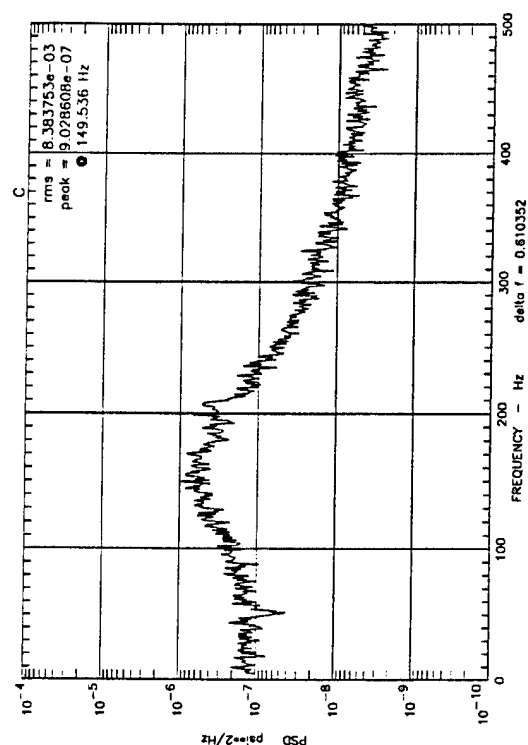
F-15 TPN 3267: q=30 alpha=20 beta=4 bp=0



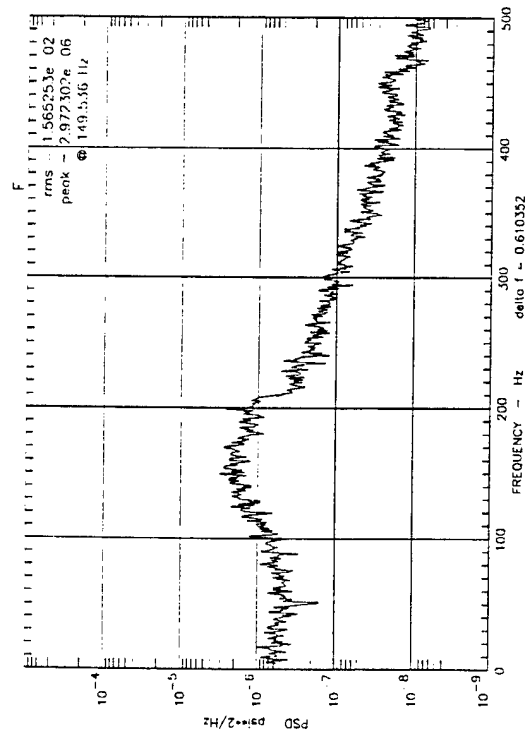
F-15 TPN 3267: q=30 alpha=20 beta=4 bp=0



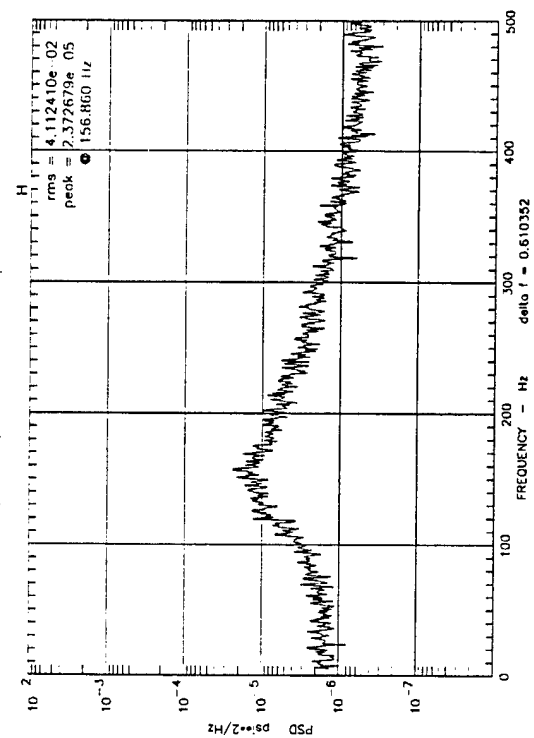
F-15 TPN 3267: q=30 alpha=20 beta=4 bp=0



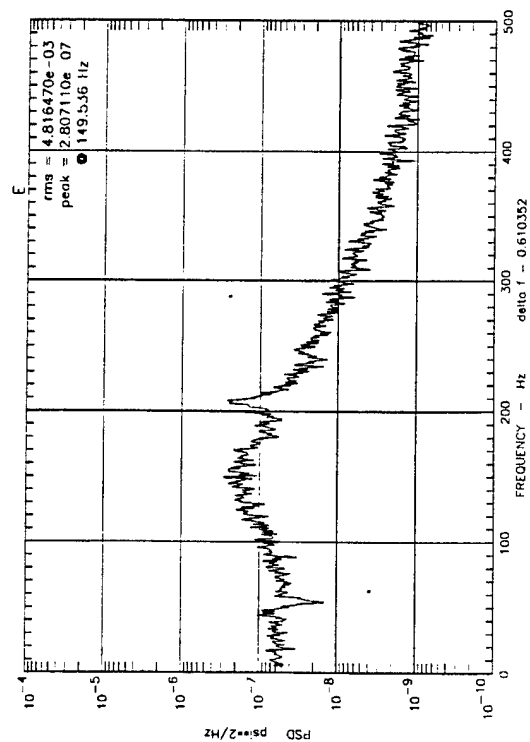
F-15 TPN\_3267: q=30 alpha=20 beta=4 bp=0



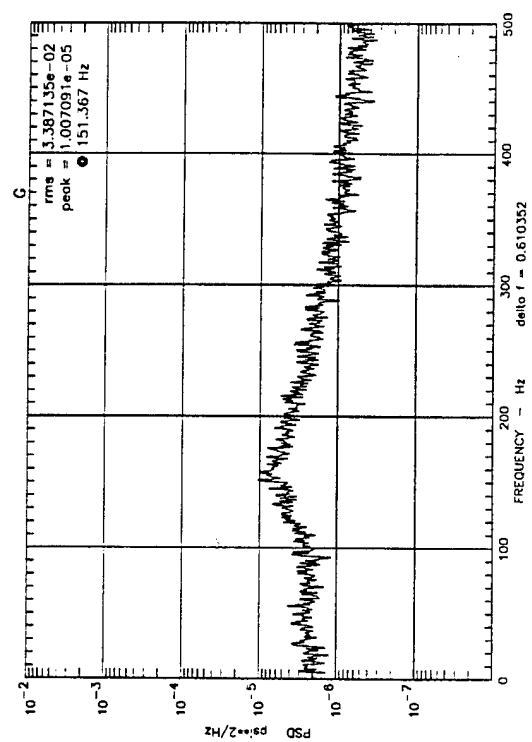
F-15 TPN\_3267: q=30 alpha=20 beta=4 bp=0

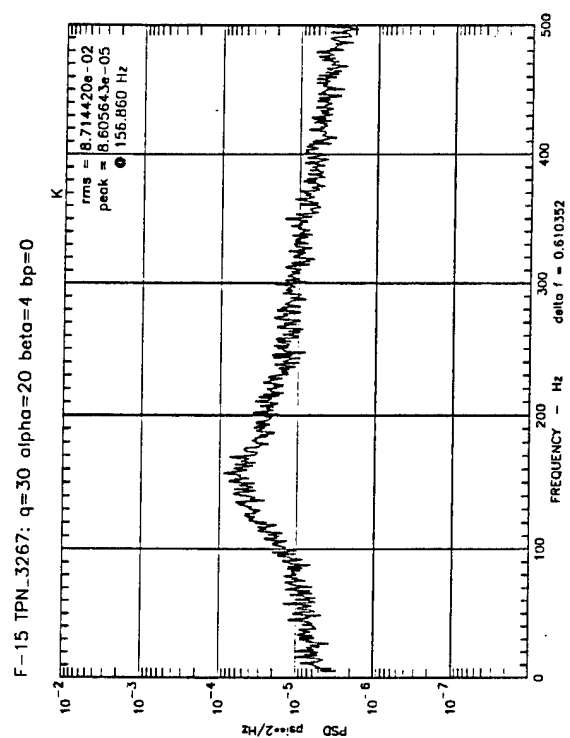
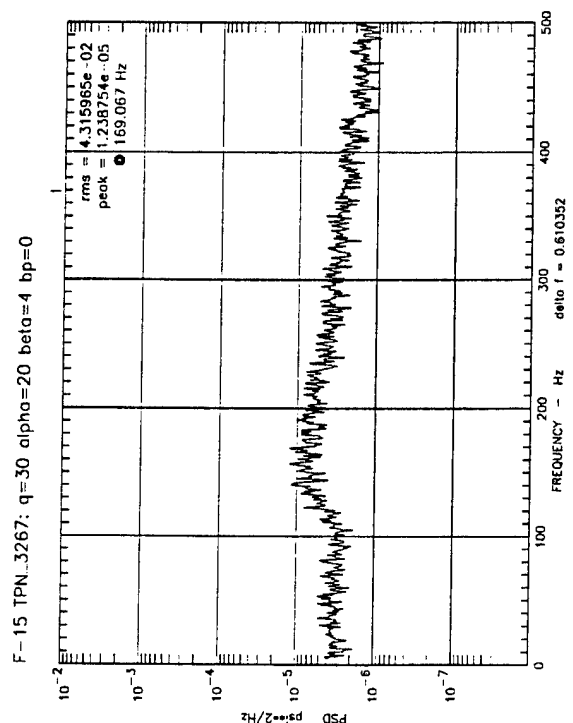
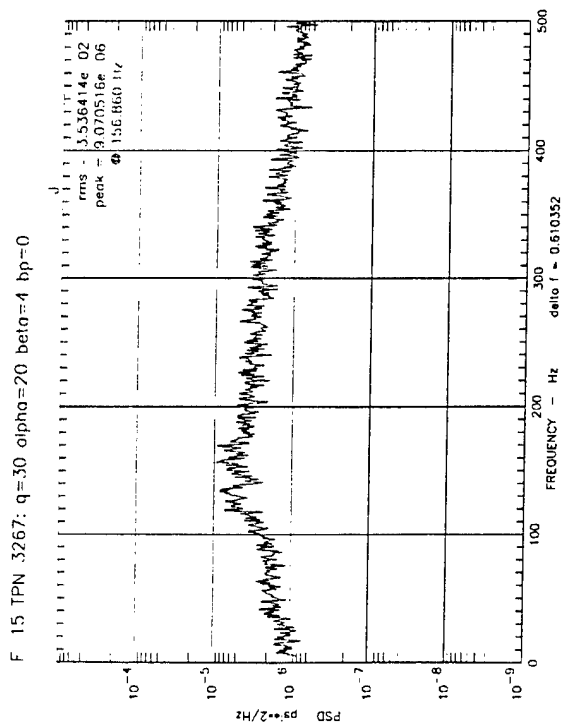


F-15 TPN\_3267: q=30 alpha=20 beta=4 bp=0

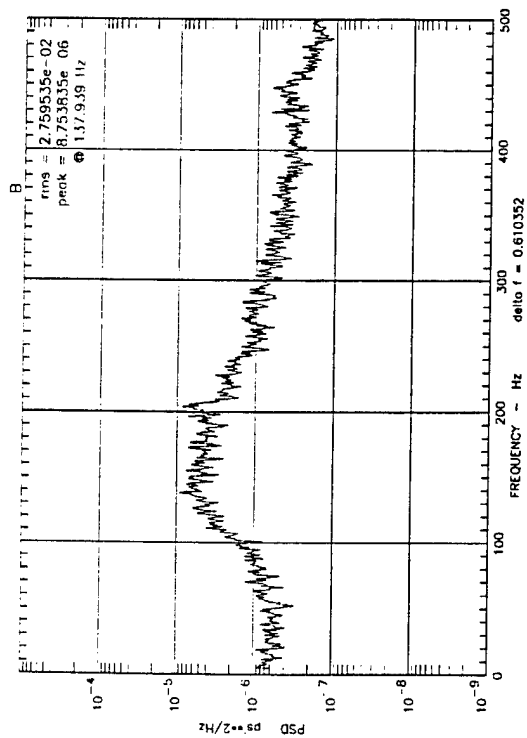


F-15 TPN\_3267: q=30 alpha=20 beta=4 bp=0

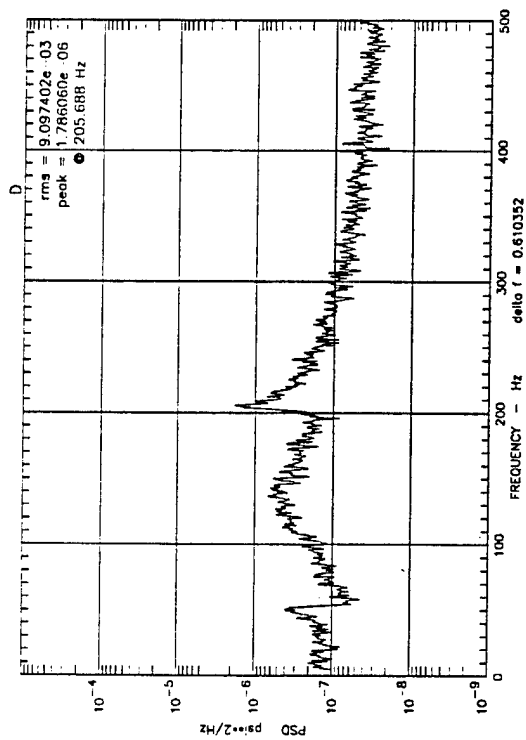




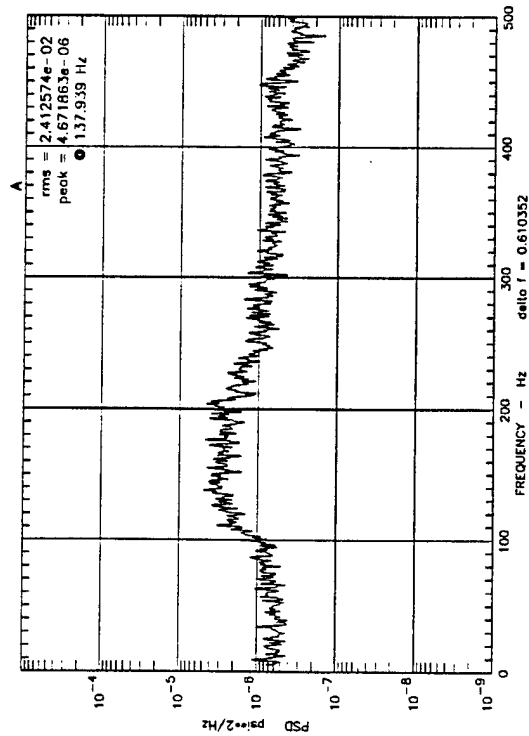
F 15 TPN 3269: q=30 alpha=24 beta=4 bp=0



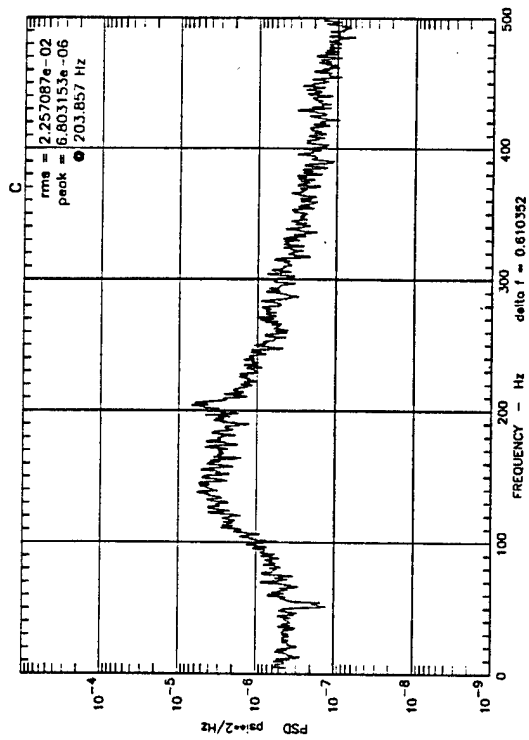
F-15 TPN\_3269: q=30 alpha=24 beta=4 bp=0



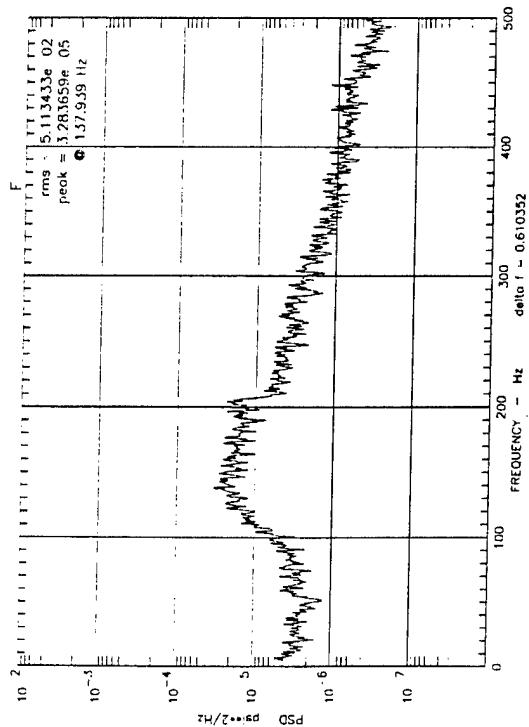
F-15 TPN\_3269: q=30 alpha=24 beta=4 bp=0



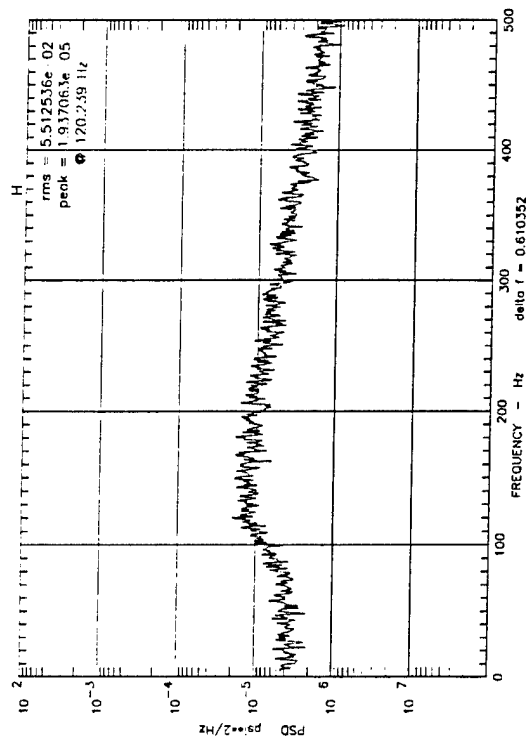
F-15 TPN\_3269: q=30 alpha=24 beta=4 bp=0



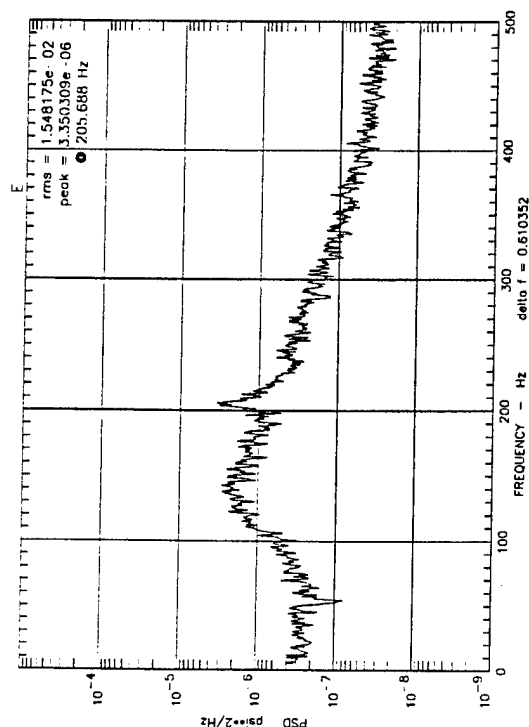
F 15 TPN 3269:  $q=30$   $\alpha=24$   $\beta=4$   $bp=0$



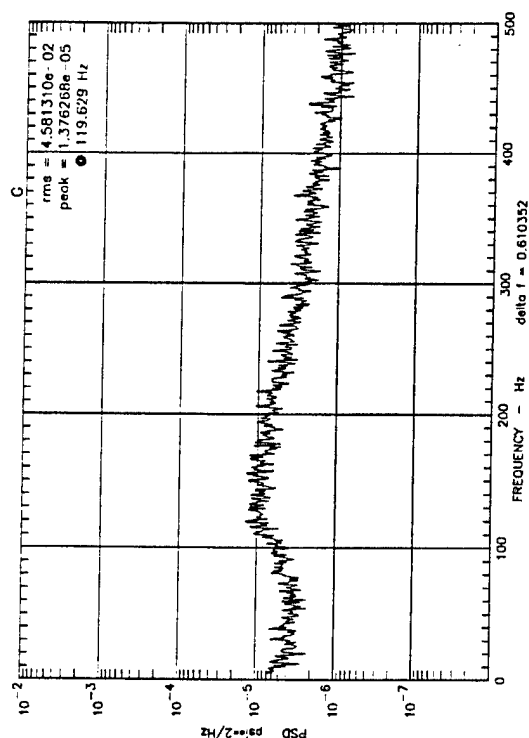
F 15 TPN 3269:  $q=30$   $\alpha=24$   $\beta=4$   $bp=0$



F 15 TPN 3269:  $q=30$   $\alpha=24$   $\beta=4$   $bp=0$

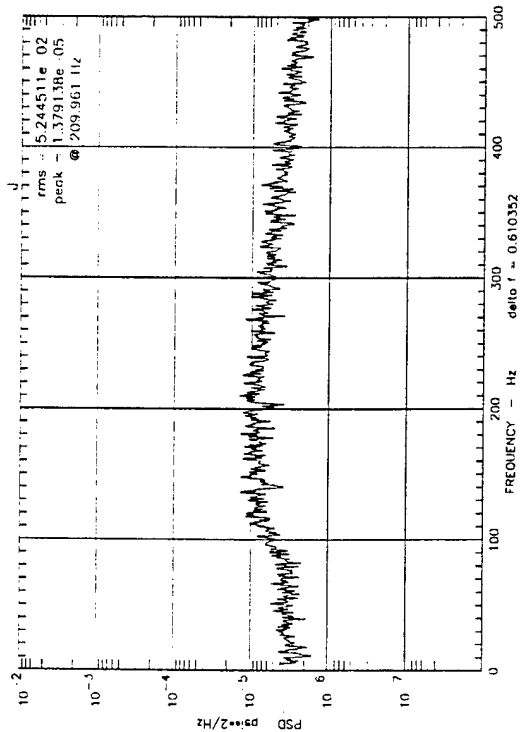


F 15 TPN 3269:  $q=30$   $\alpha=24$   $\beta=4$   $bp=0$

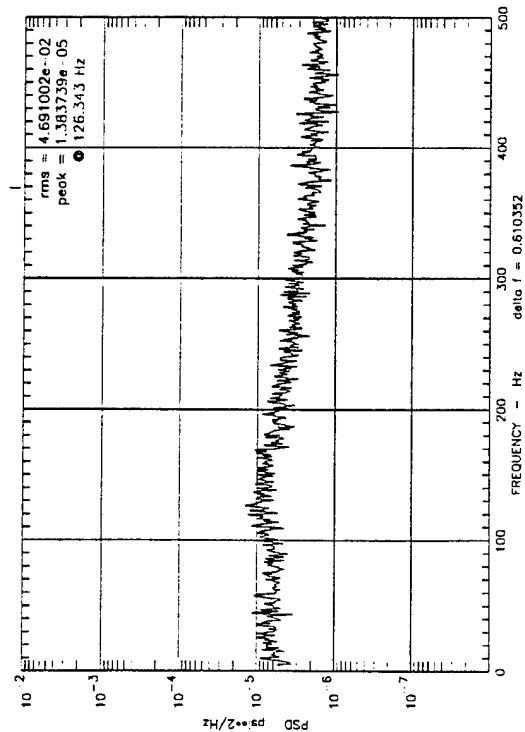




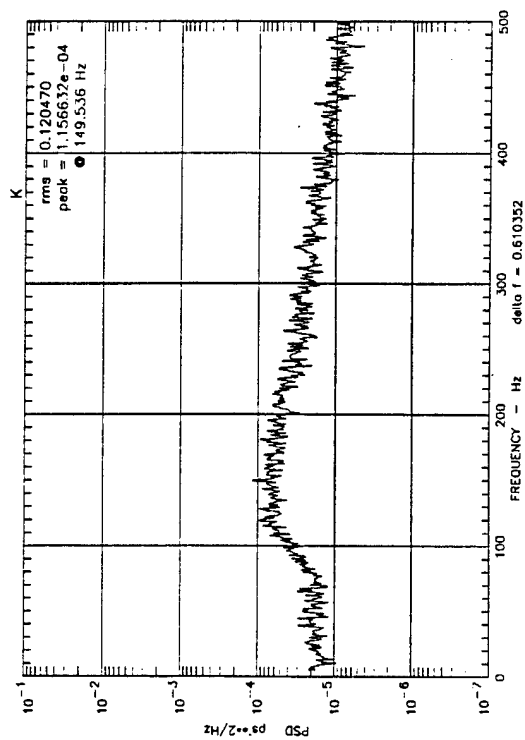
F-15 TPN\_3269: q=30 alpha=24 beta=4 bp=0



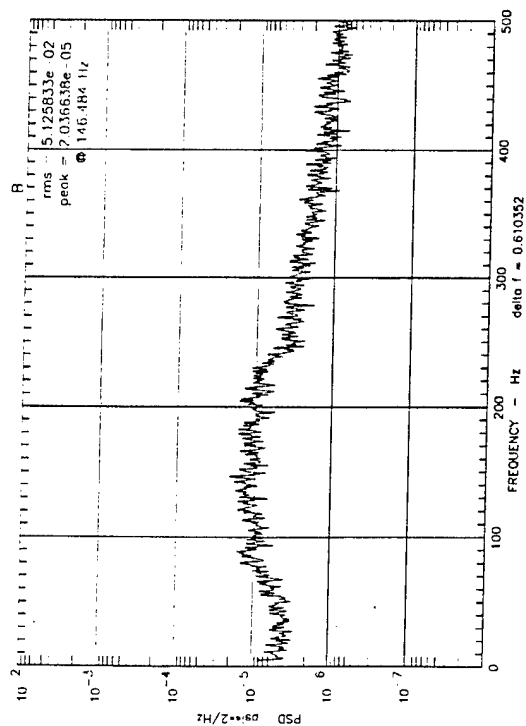
F-15 TPN\_3269: q=30 alpha=24 beta=4 bp=0



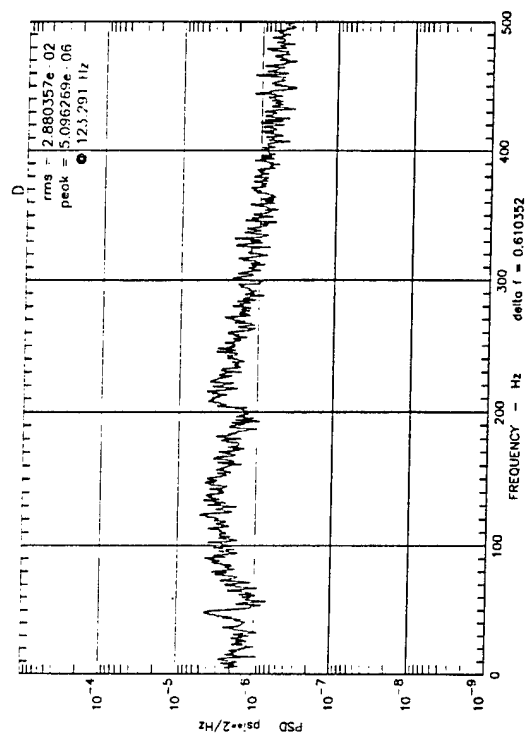
F-15 TPN\_3269: q=30 alpha=24 beta=4 bp=0



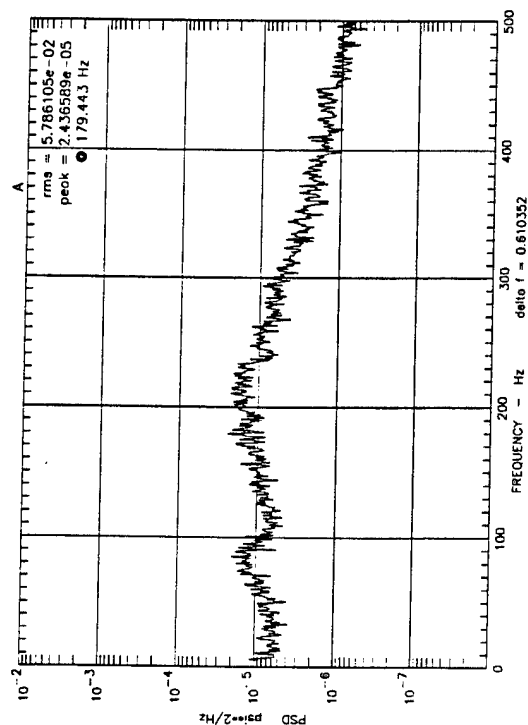
F-15 TPN\_3271: q=30 alpha=32 beta=4 bp=0



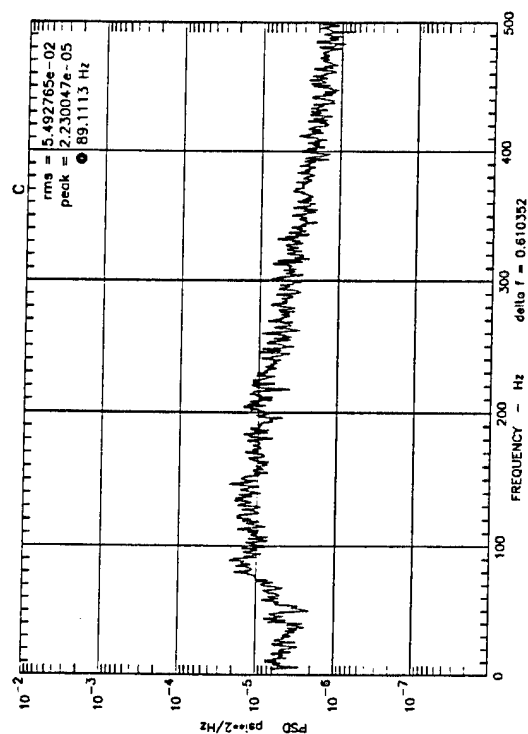
F-15 TPN\_3271: q=30 alpha=32 beta=4 bp=0



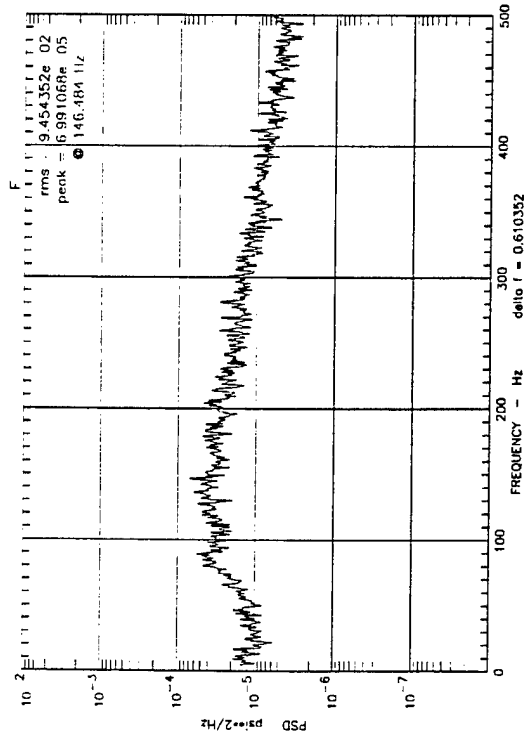
F-15 TPN\_3271: q=30 alpha=32 beta=4 bp=0



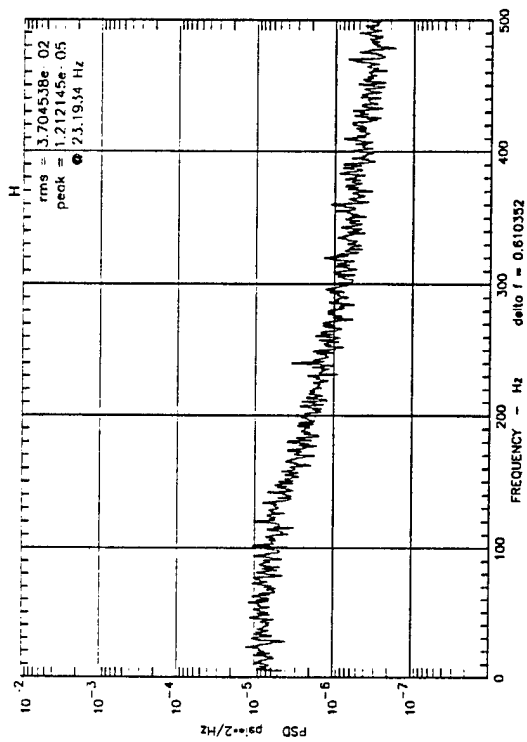
F-15 TPN\_3271: q=30 alpha=32 beta=4 bp=0



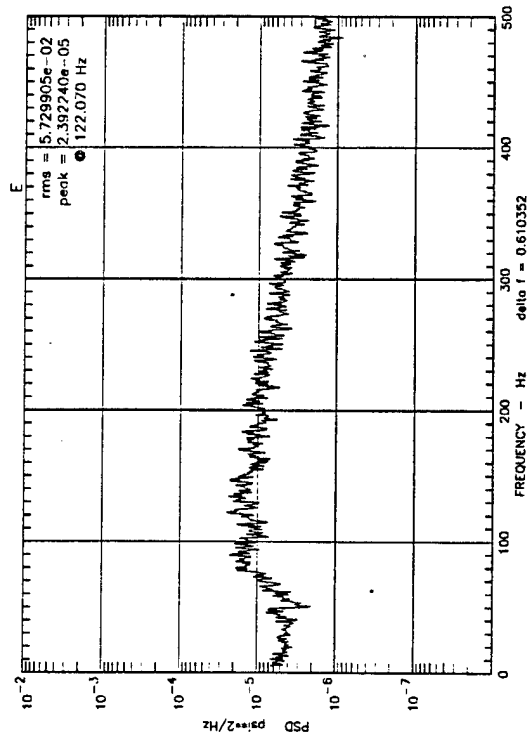
F-15 TPN\_3271: q=30 alpha=32 beta=4 bp=0



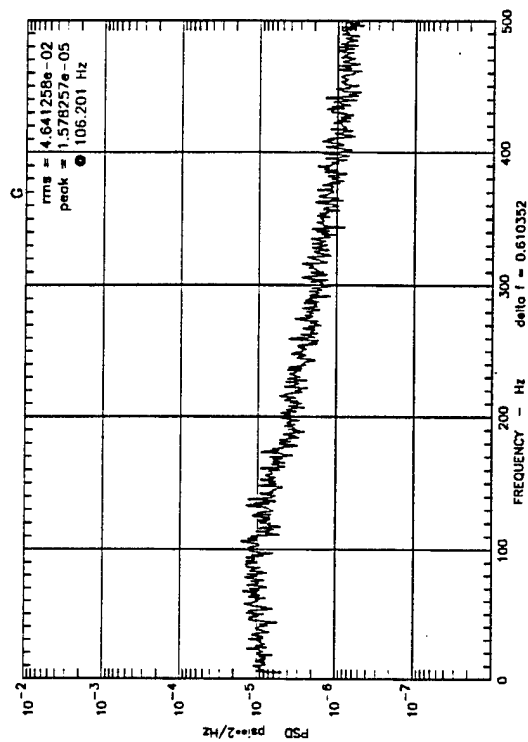
F-15 TPN\_3271: q=30 alpha=32 beta=4 bp=0



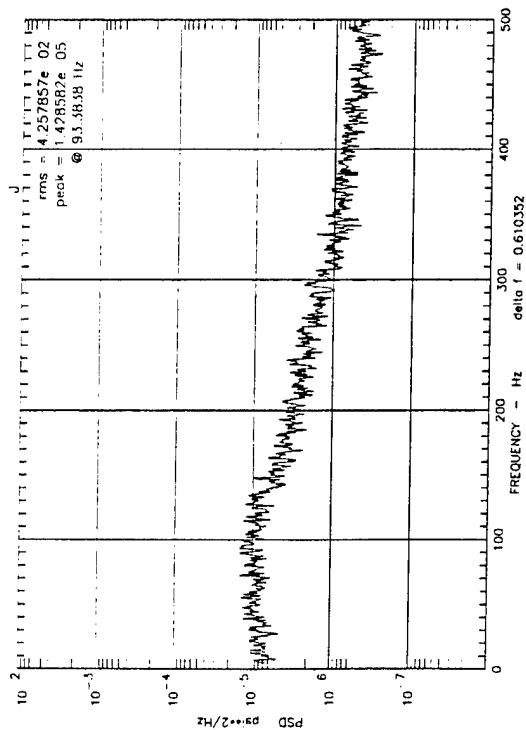
F-15 TPN\_3271: q=30 alpha=32 beta=4 bp=0



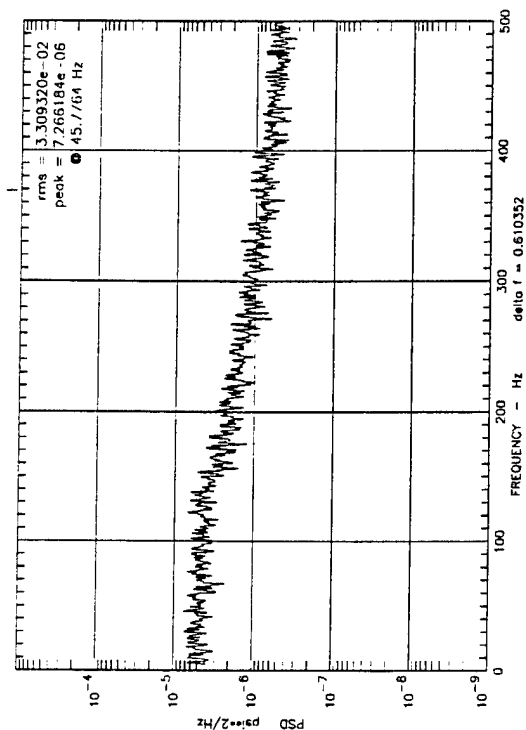
F-15 TPN\_3271: q=30 alpha=32 beta=4 bp=0



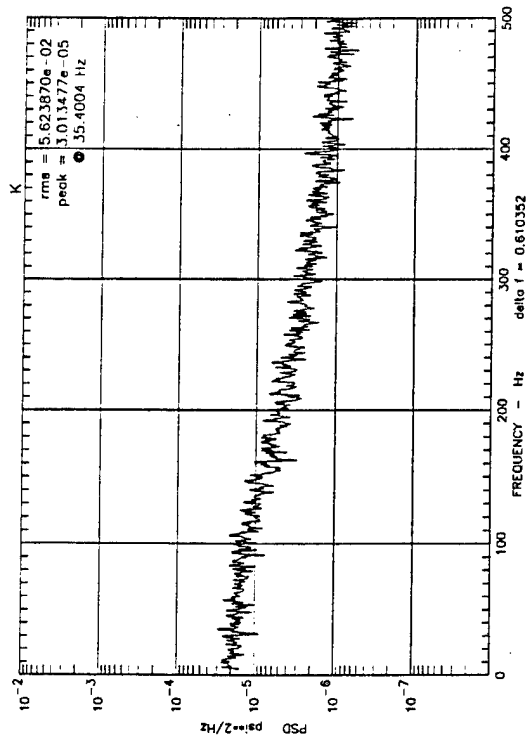
F 15 TPN .3271; q=30 alpha=32 beta=4 bp=0



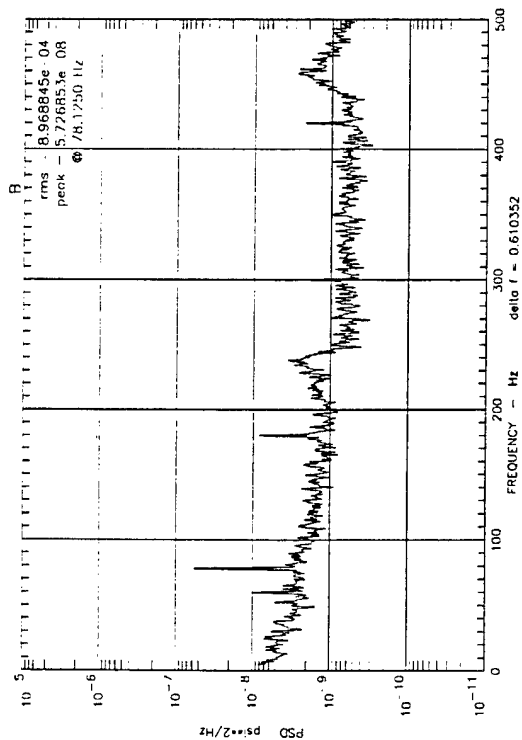
F 15 TPN .3271; q=30 alpha=32 beta=4 bp=0



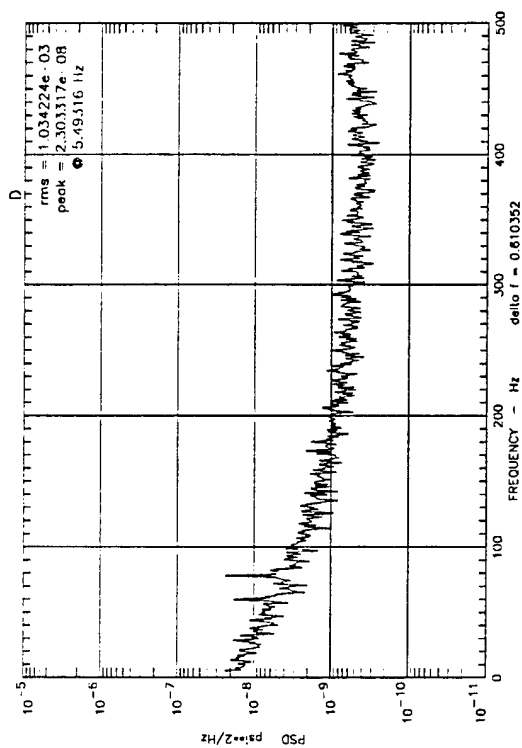
F 15 TPN .3271; q=30 alpha=32 beta=4 bp=0



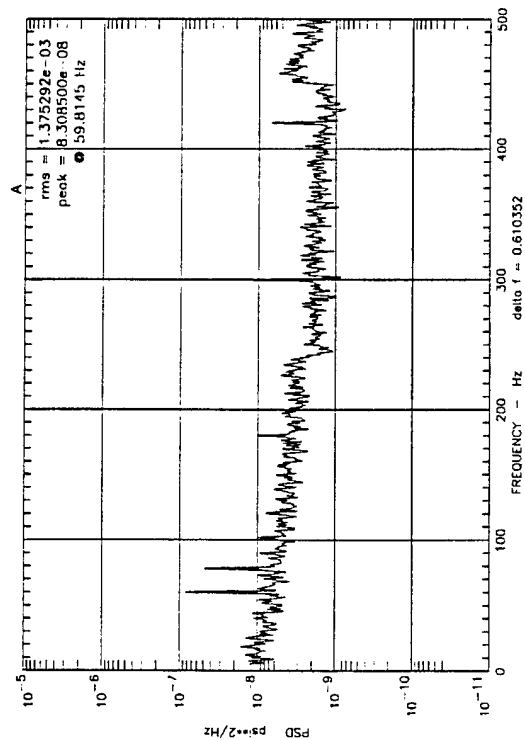
F-15 TPN\_3243: q=30 alpha=8 beta=0 bp=0



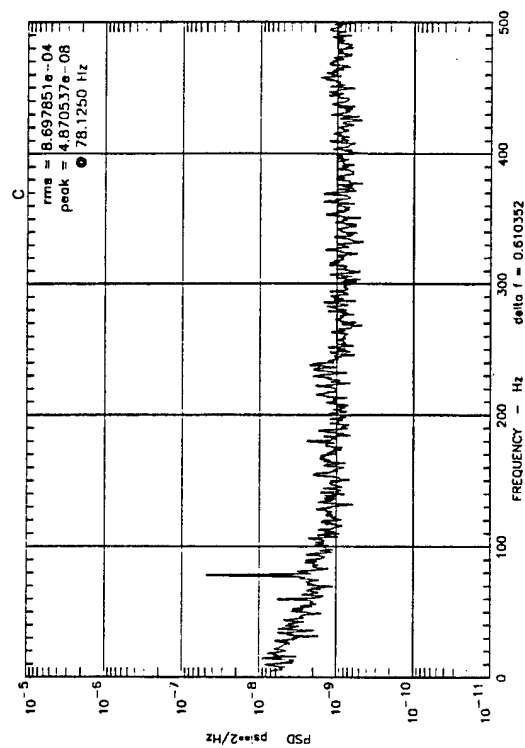
F-15 TPN\_3243: q=30 alpha=8 beta=0 bp=0



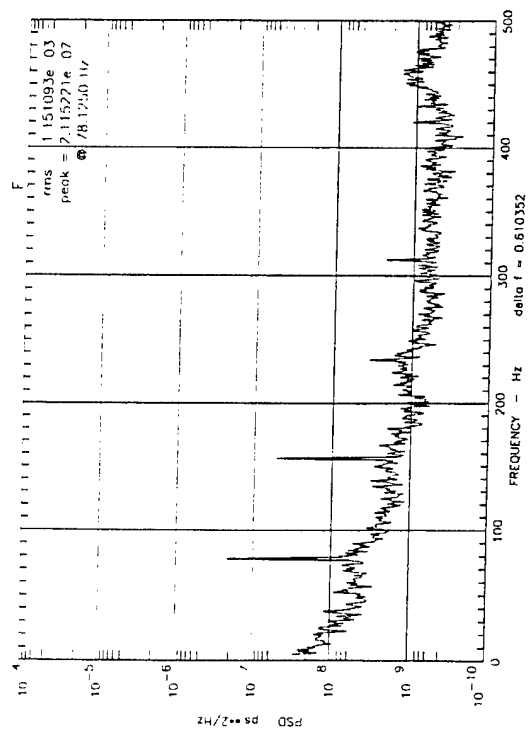
F-15 TPN\_3243: q=30 alpha=8 beta=0 bp=0



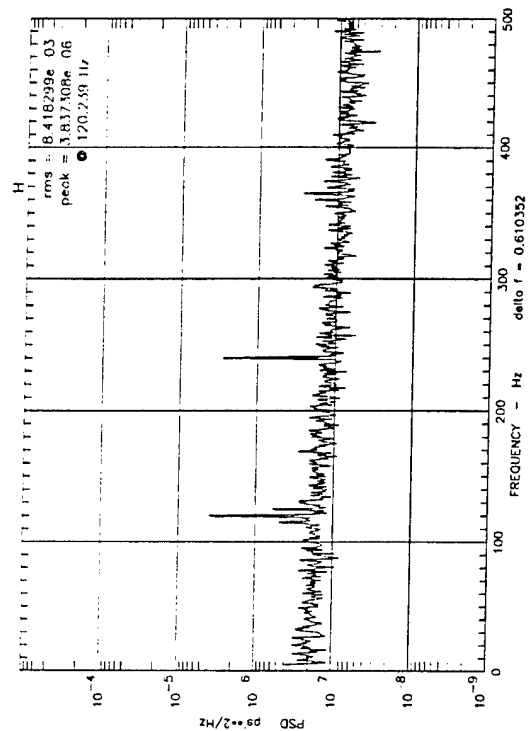
F-15 TPN\_3243: q=30 alpha=8 beta=0 bp=0



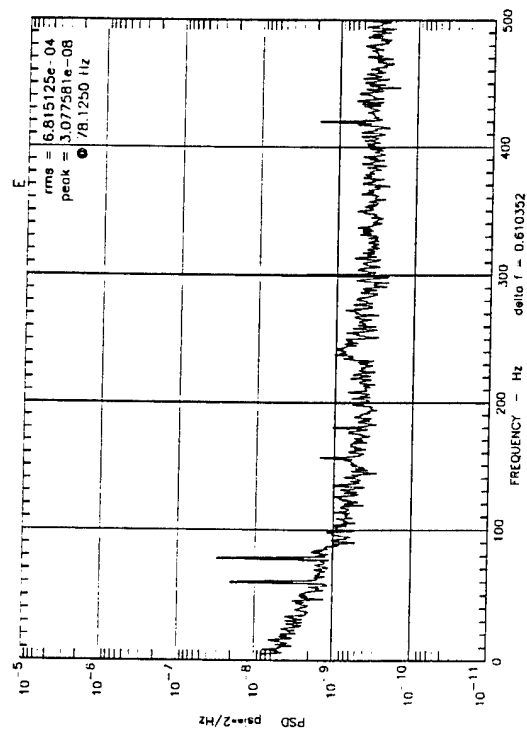
F 15 TPN 3243: q=30 alpha=8 beta=0 bp=0



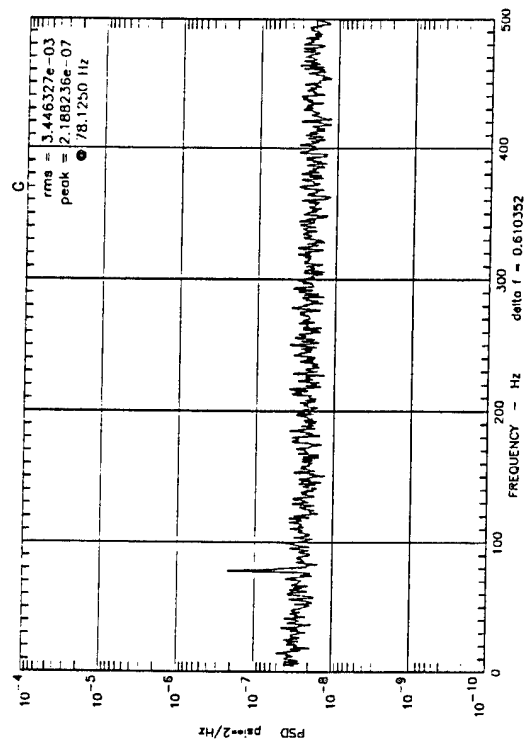
F 15 TPN 3243: q=30 alpha=8 beta=0 bp=0



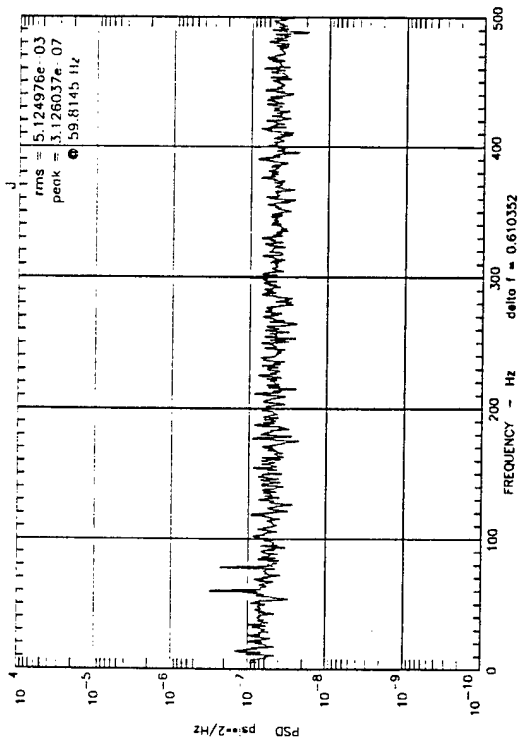
E 15 TPN 3243: q=30 alpha=8 beta=0 bp=0



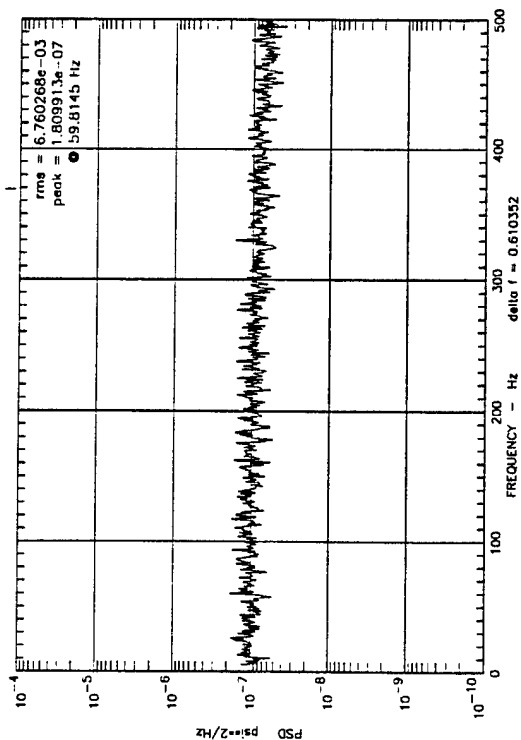
F 15 TPN 3243: q=30 alpha=8 beta=0 bp=0



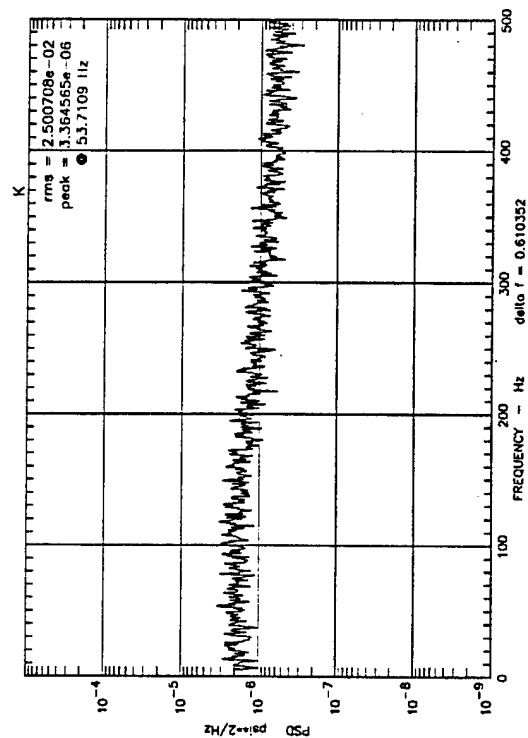
F-15 TPN\_3243: q=30 alpha=8 beta=0 bp=0



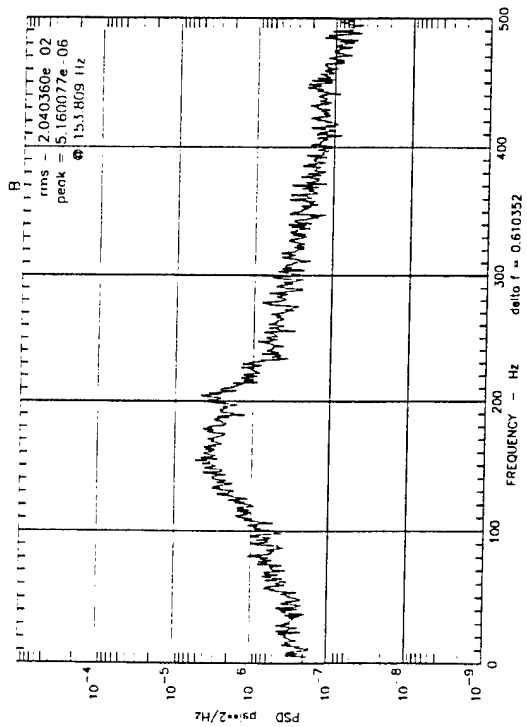
F-15 TPN\_3243: q=30 alpha=8 beta=0 bp=0



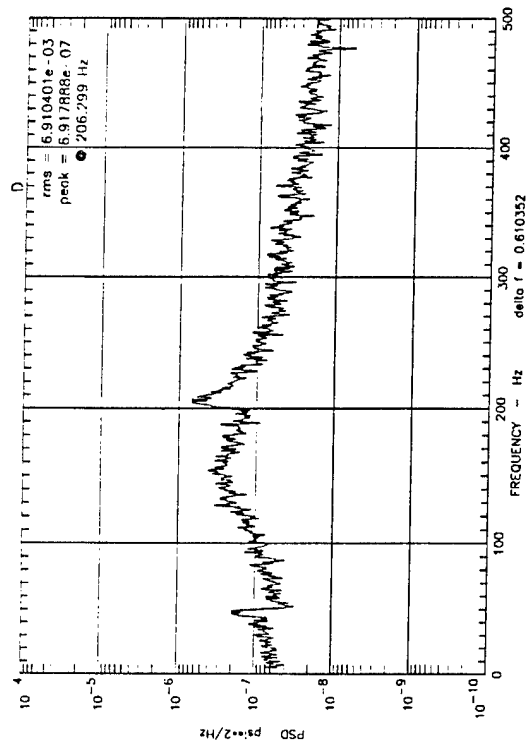
F-15 TPN\_3243: q=30 alpha=8 beta=0 bp=0



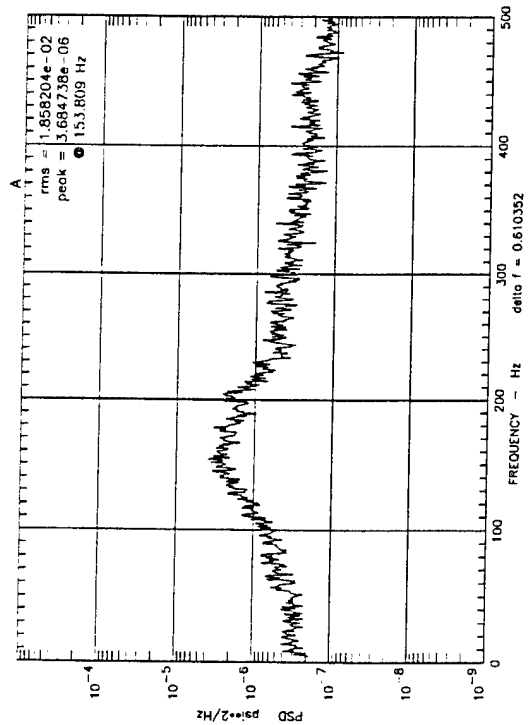
F-15 TPN\_3249: q=30 alpha=20 beta=0 bp=0



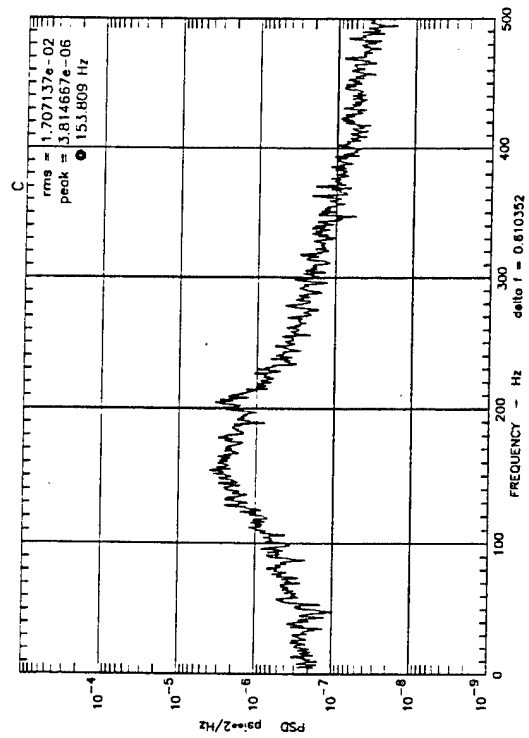
F-15 TPN\_3249: q=30 alpha=20 beta=0 bp=0



F-15 TPN\_3249: q=30 alpha=20 beta=0 bp=0

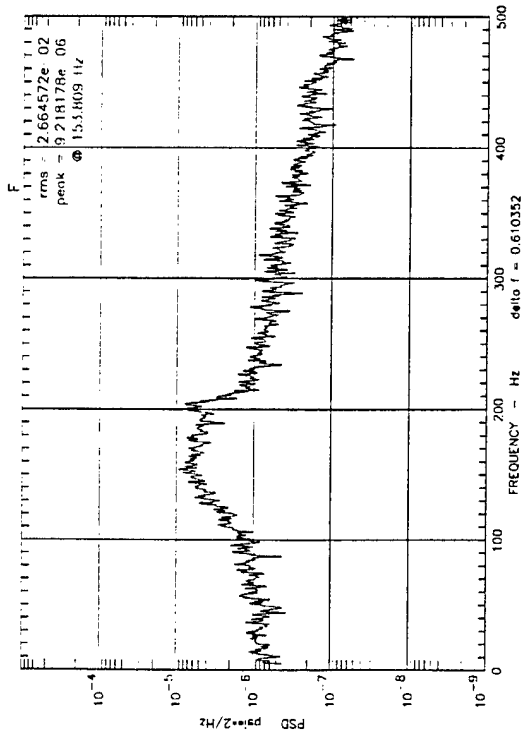


F-15 TPN\_3249: q=30 alpha=20 beta=0 bp=0

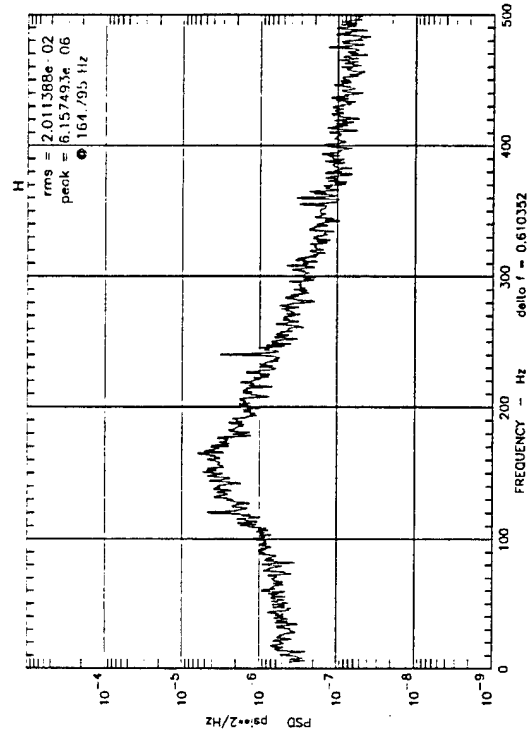




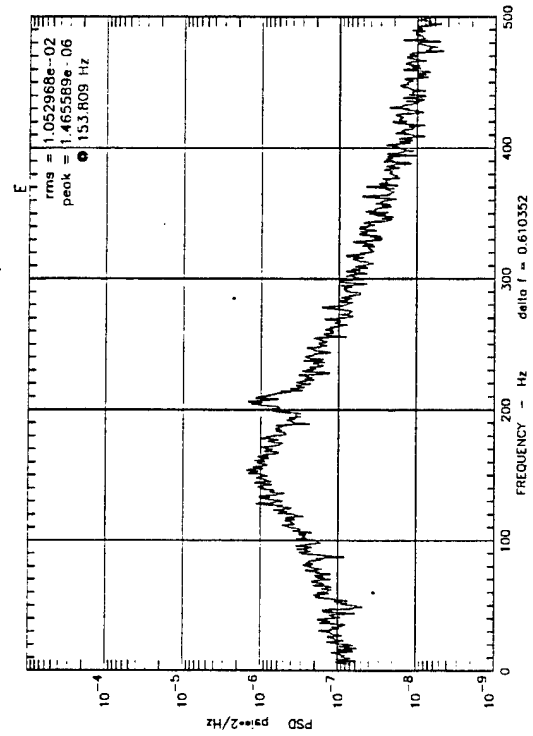
F-15 TPN\_3249: q=30 alpha=20 beta=0 bp=0



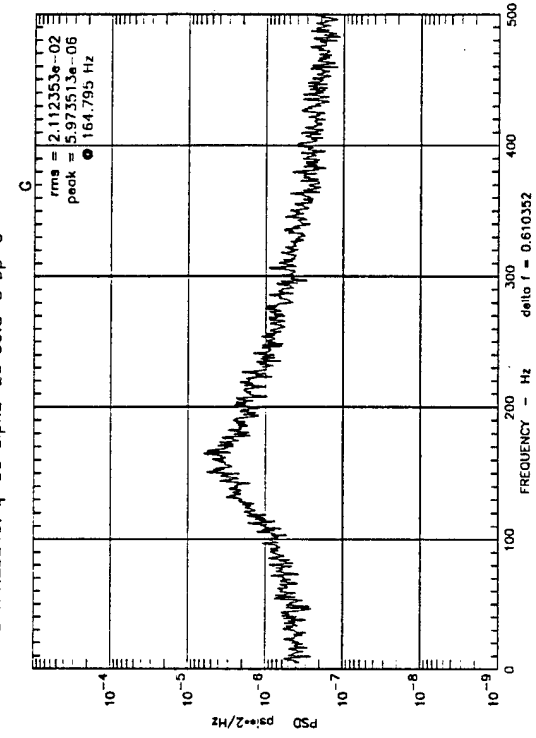
F-15 TPN\_3249: q=30 alpha=20 beta=0 bp=0



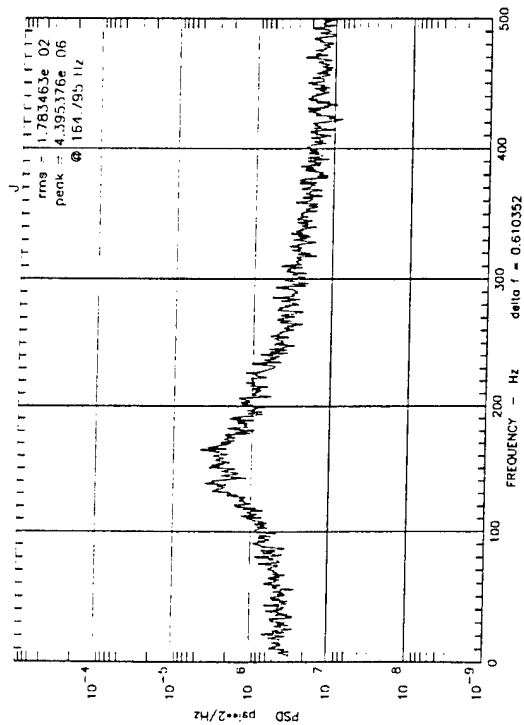
F-15 TPN\_3249: q=30 alpha=20 beta=0 bp=0



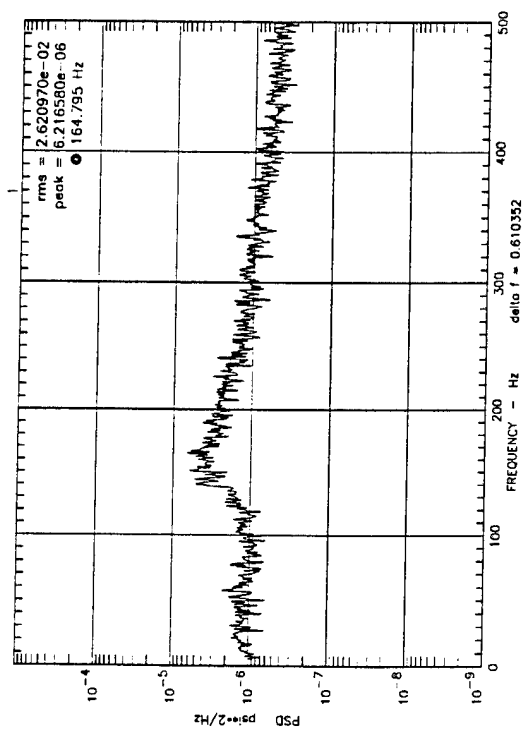
F-15 TPN\_3249: q=30 alpha=20 beta=0 bp=0



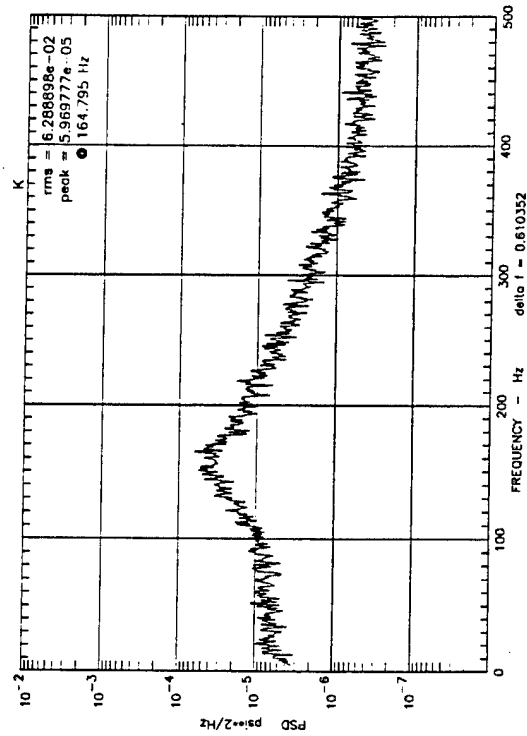
F-15 TPN\_3249: q=30 alpha=20 beta=0 bp=0



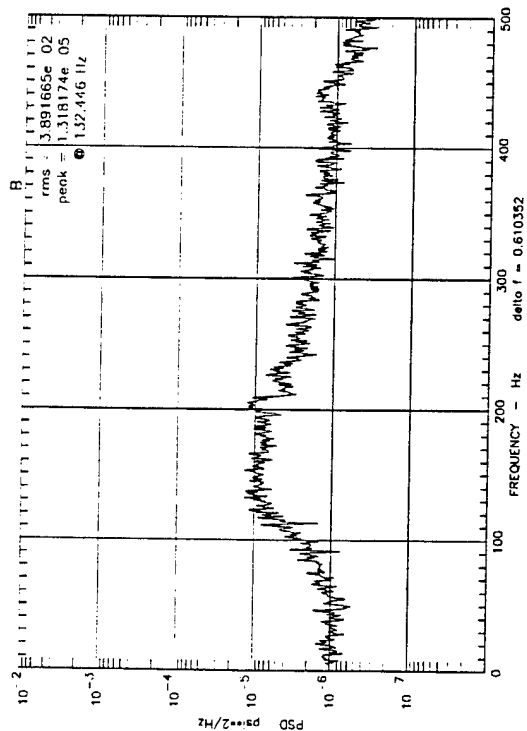
F-15 TPN\_3249: q=30 alpha=20 beta=0 bp=0



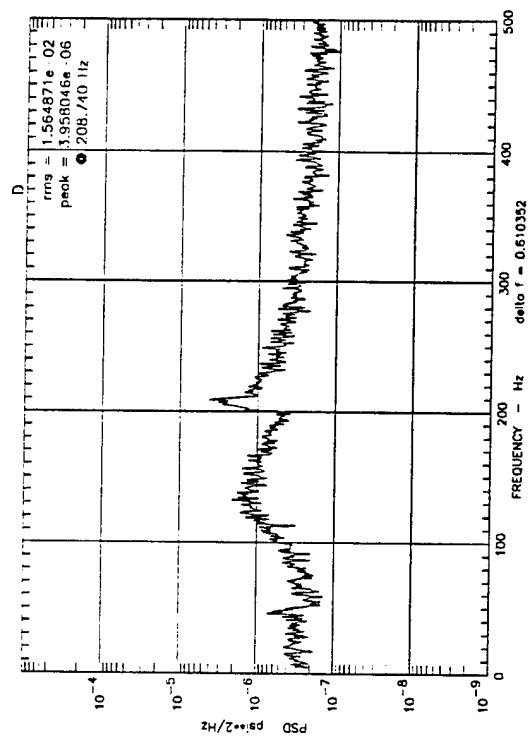
F-15 TPN\_3249: q=30 alpha=20 beta=0 bp=0



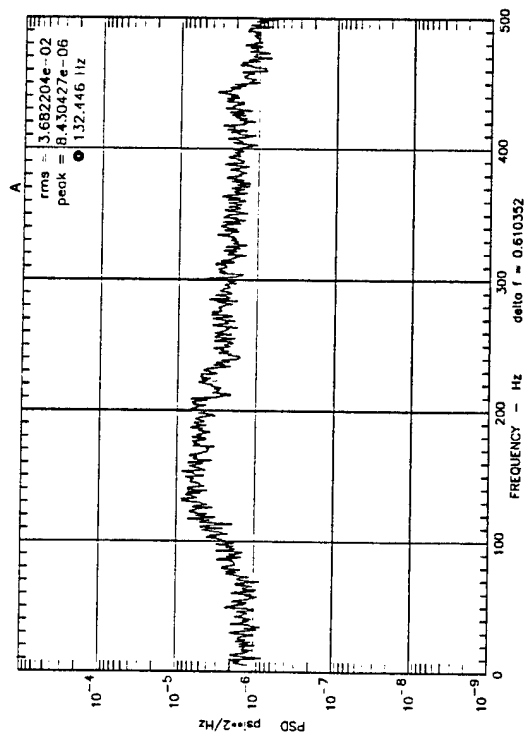
F-15 TPN\_3251: q=30 alpha=24 beta=0 bp=0



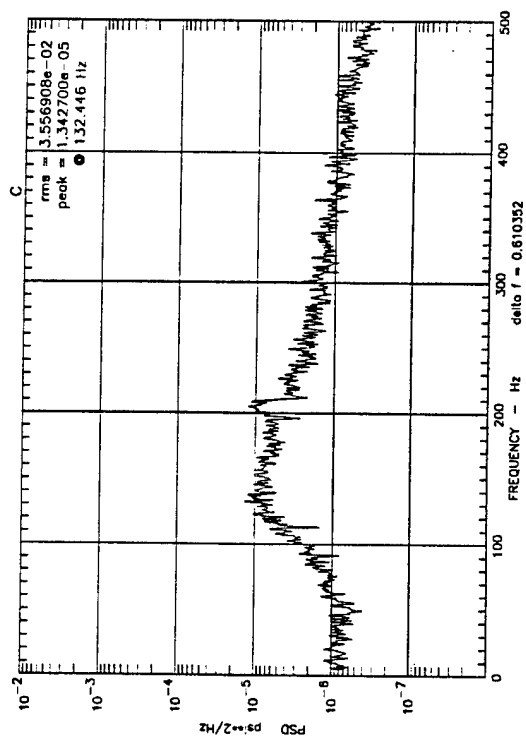
F-15 TPN\_3251: q=30 alpha=24 beta=0 bp=0



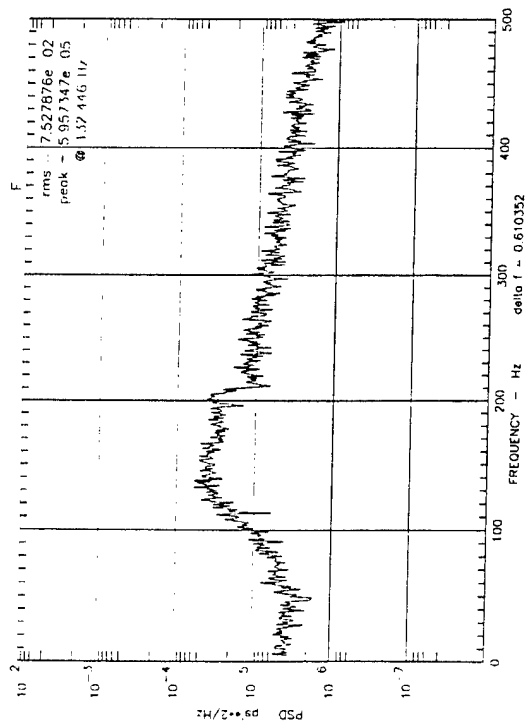
F-15 TPN\_3251: q=30 alpha=24 beta=0 bp=0



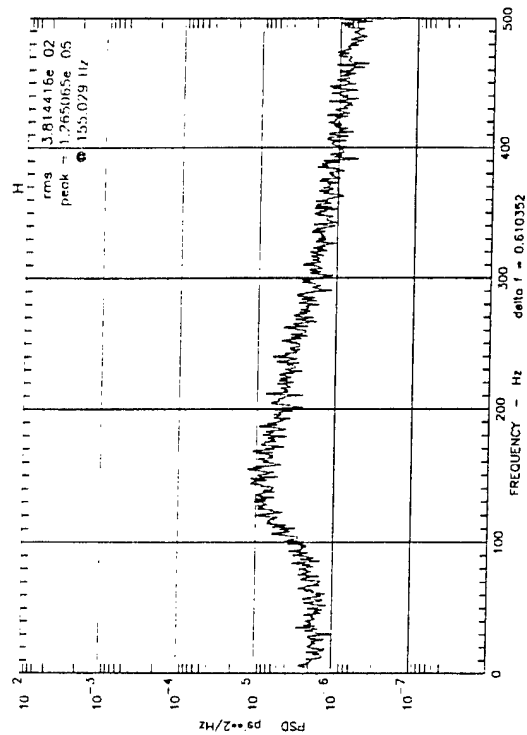
F-15 TPN\_3251: q=30 alpha=24 beta=0 bp=0



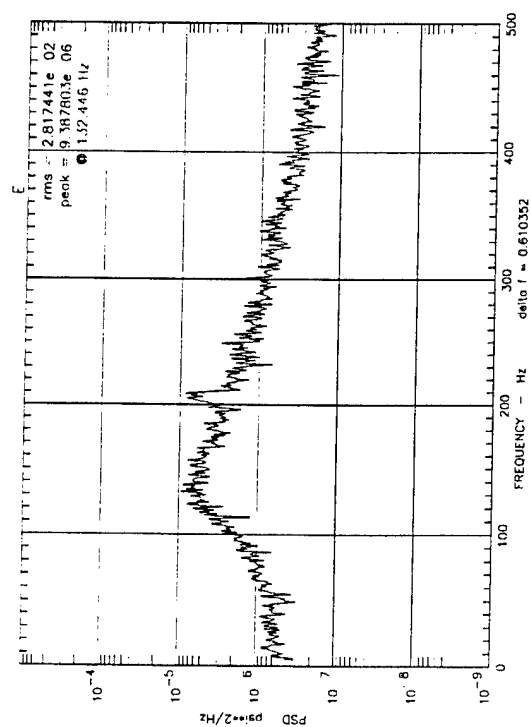
F 15 TPN 3251: q=30 alpha=24 beta=0 bp=0



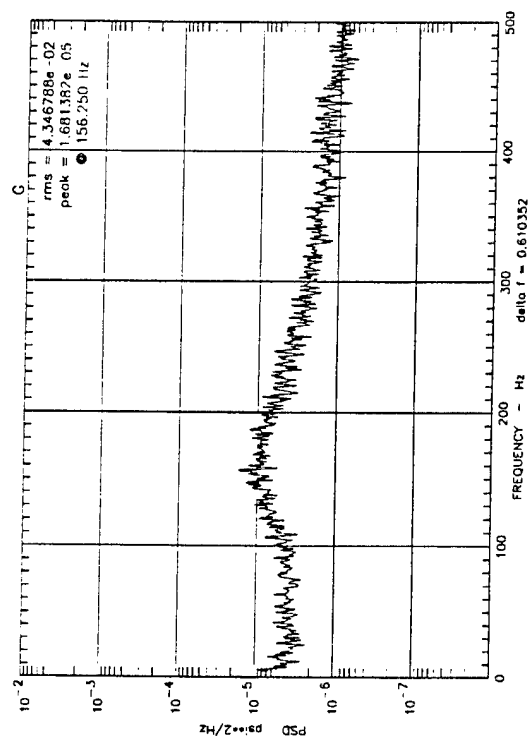
F 15 TPN 3251: q=30 alpha=24 beta=0 bp=0



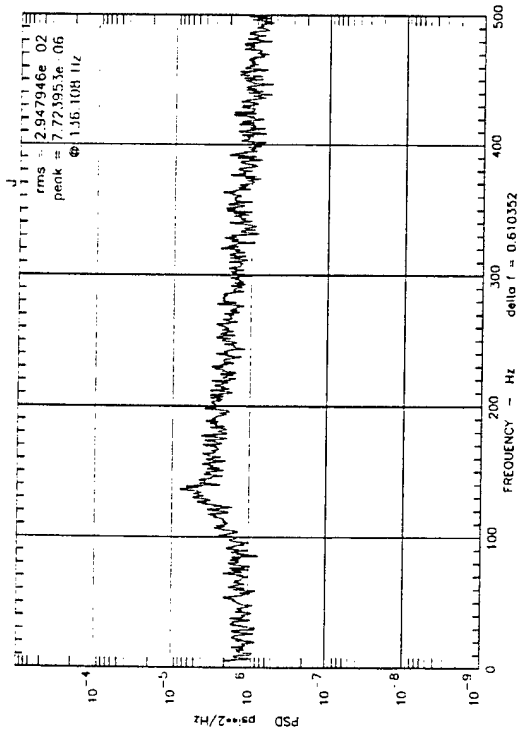
F 15 TPN 3251: q=30 alpha=24 beta=0 bp=0



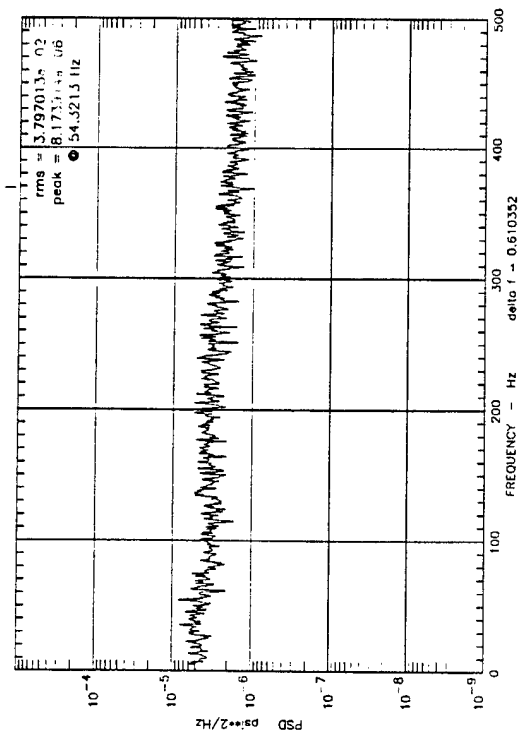
F 15 TPN 3251: q=30 alpha=24 beta=0 bp=0



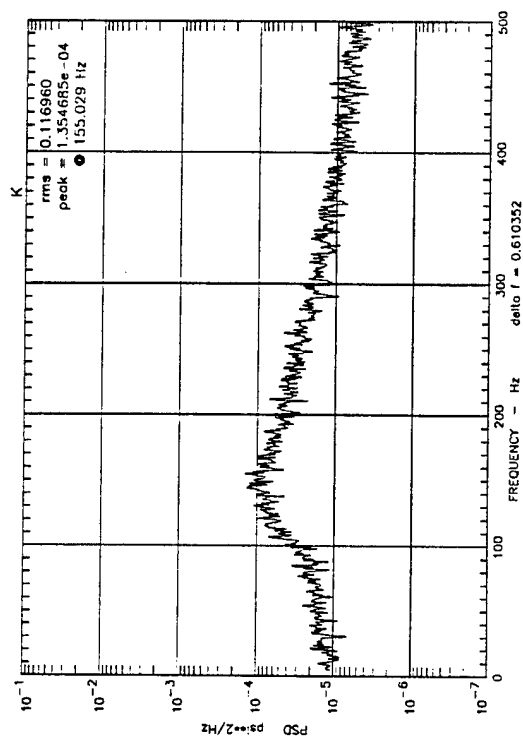
F 15 TPN\_3251: q=30 alpha=24 beta=0 bp=0



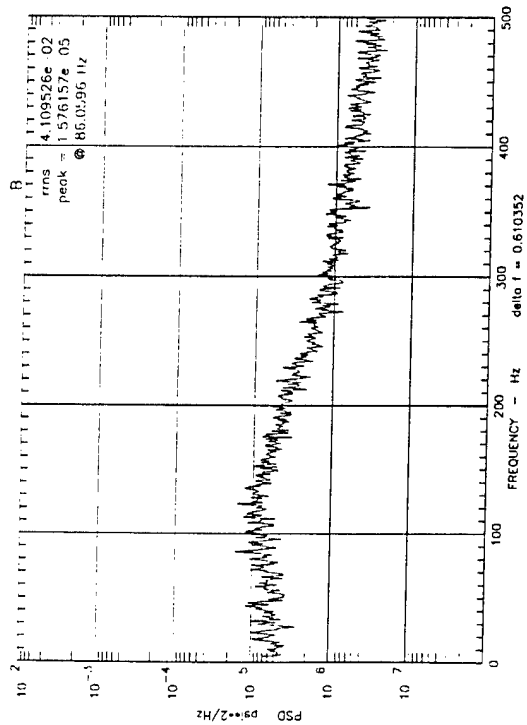
F-15 TPN\_3251: q=30 alpha=24 beta=0 bp=0



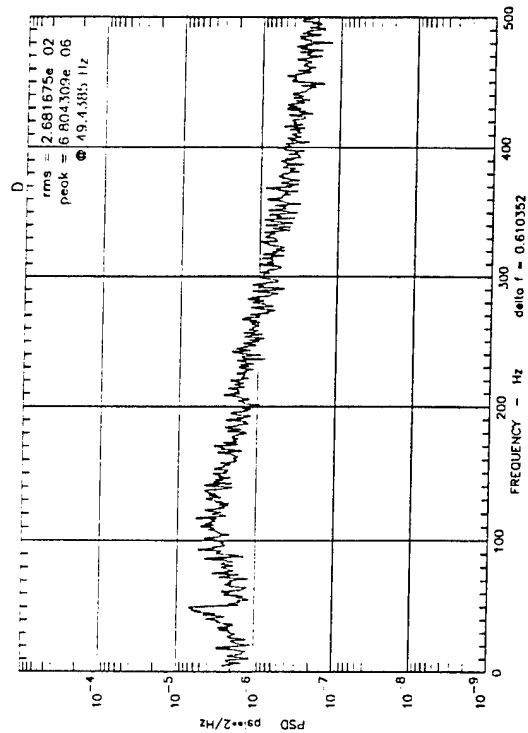
F-15 TPN\_3251: q=30 alpha=24 beta=0 bp=0



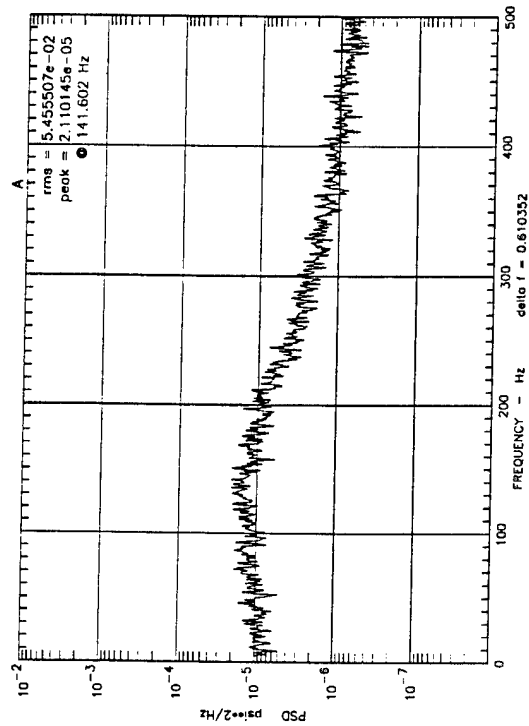
F 15 TPN 3253: q=30 alpha=32 beta=0 bp=0



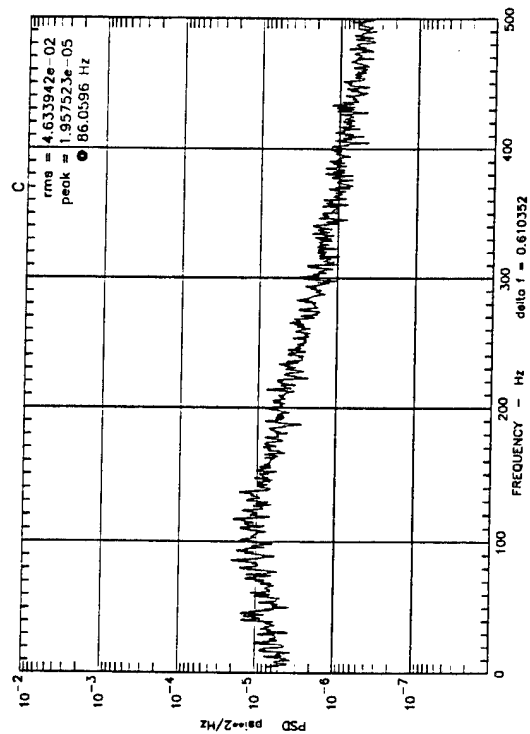
F 15 TPN 3253: q=30 alpha=32 beta=0 bp=0



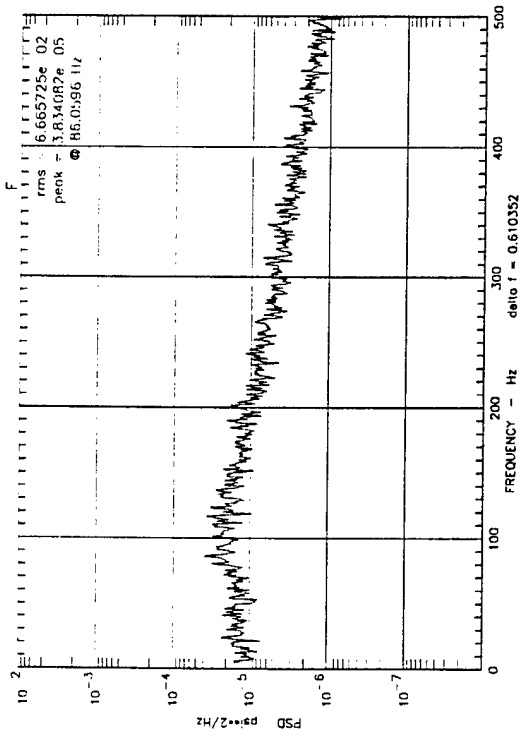
F 15 TPN 3253: q=30 alpha=32 beta=0 bp=0



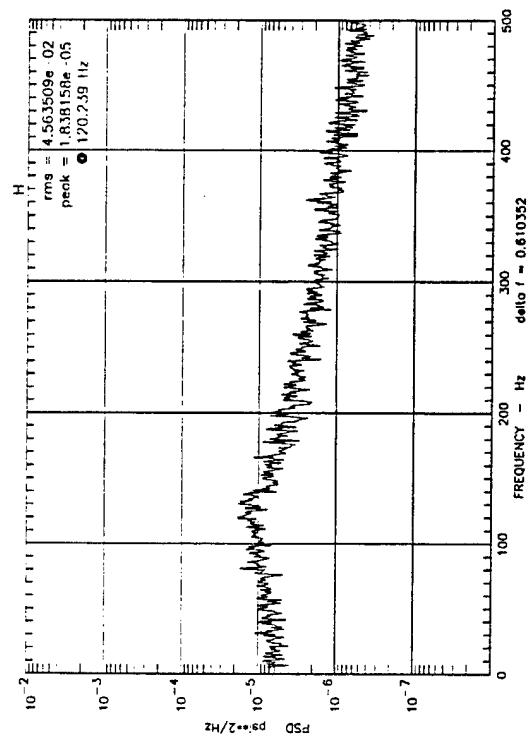
F 15 TPN 3253: q=30 alpha=32 beta=0 bp=0



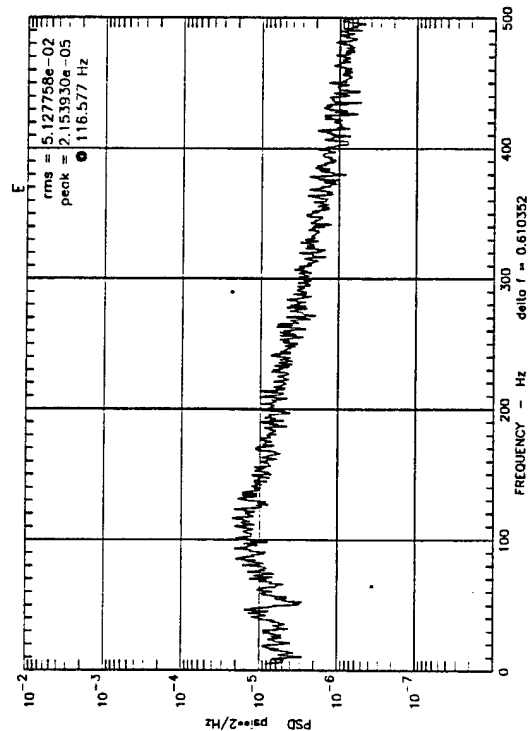
F 15 TPN 3253: q=30 alpha=32 beta=0 bp=0



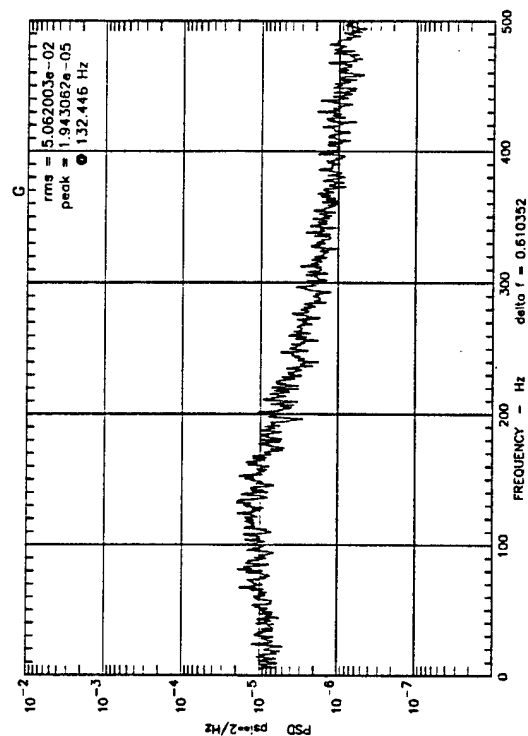
F-15 TPN 3253: q=30 alpha=32 beta=0 bp=0



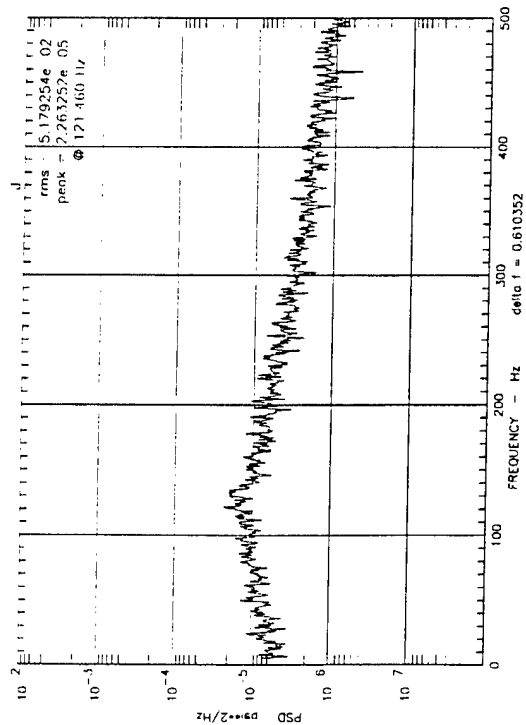
F-15 TPN 3253: q=30 alpha=32 beta=0 bp=0



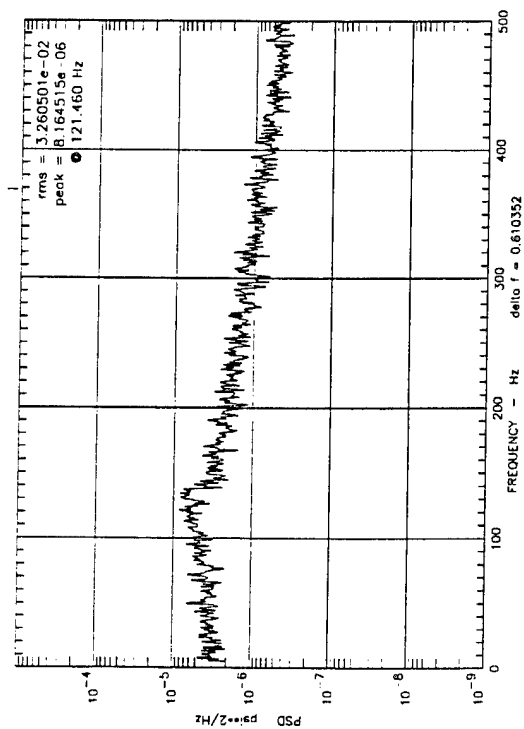
F-15 TPN 3253: q=30 alpha=32 beta=0 bp=0



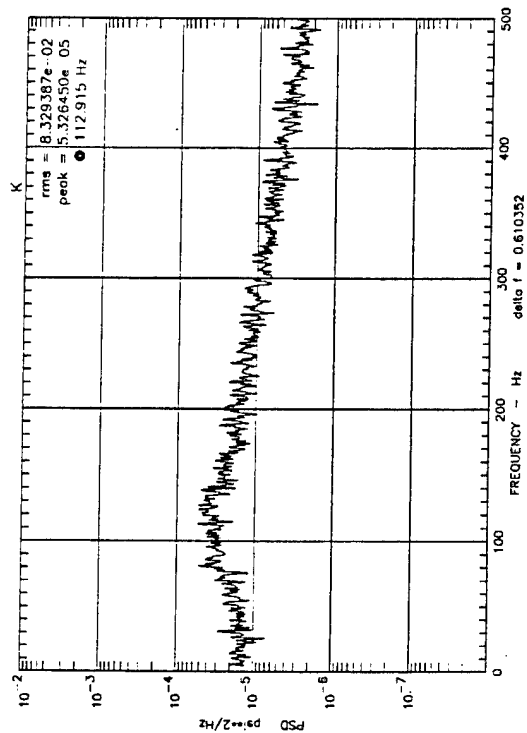
F 15 TPN .3253: q=30 alpha=32 beta=0 bp=0



F 15 TPN .3253: q=30 alpha=32 beta=0 bp=0



F 15 TPN .3253: q=30 alpha=32 beta=0 bp=0



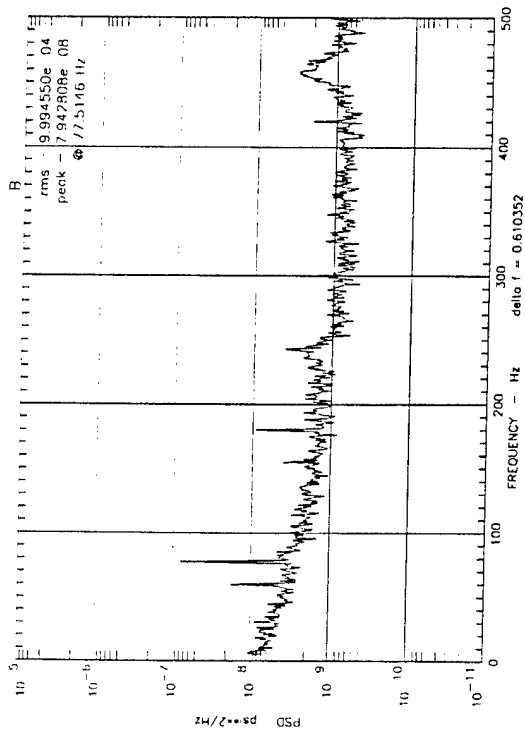


**PRESSURE PSD's**

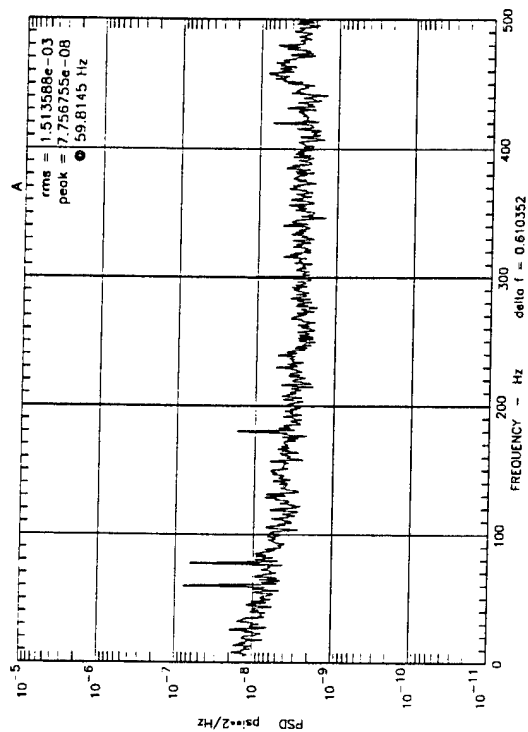
**Q= 30 PSF**

**2.2.1.2 PSD GRAPHS ( 5- 500 HZ), WBP= 45 PSI, BETA =0, -4, +4 DEG,  
ALPHA 8.....32 DEG**

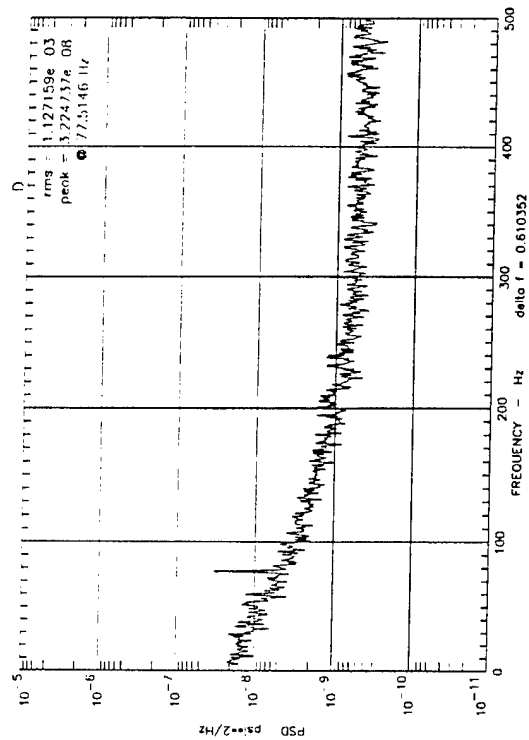
F 15 TPN 3315: q=30 alpha=8 beta=4 bp=45



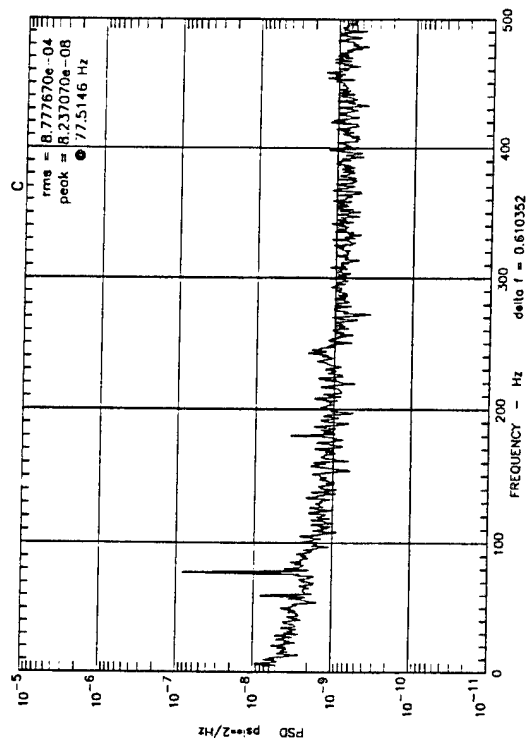
F 15 TPN 3315: q=30 alpha=8 beta=4 bp=45



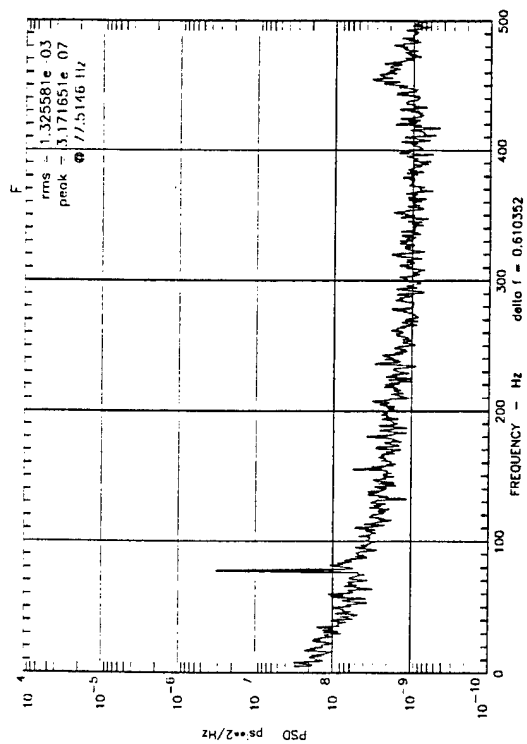
F 15 TPN 3315: q=30 alpha=8 beta=4 bp=45



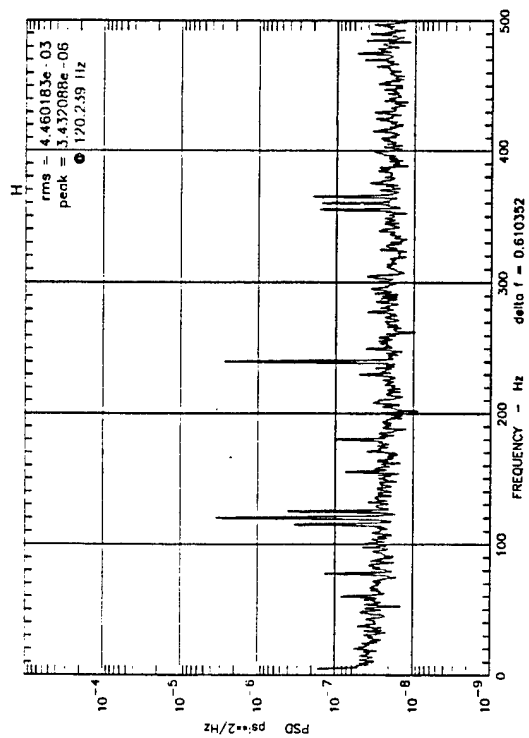
F 15 TPN 3315: q=30 alpha=8 beta=4 bp=45



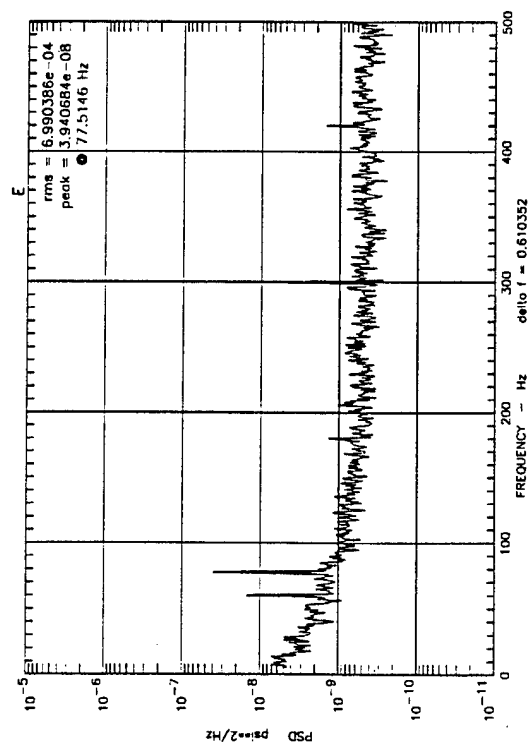
F 15 TPN\_3315: q=30 alpha=8 beta=4 bp=45



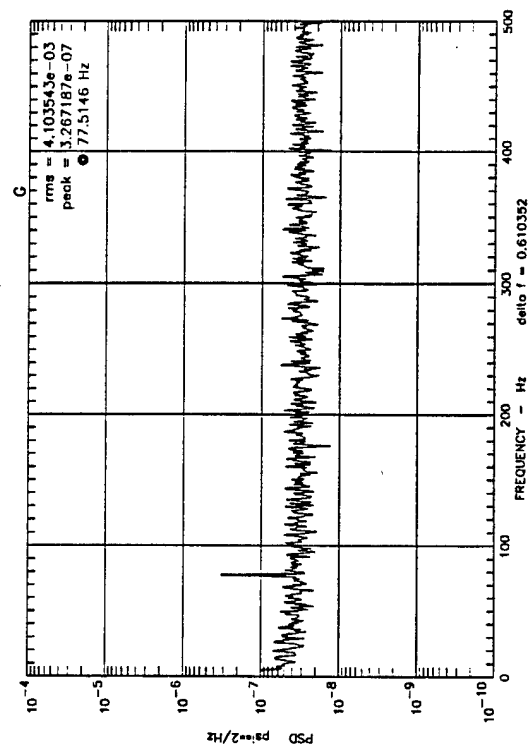
F 15 TPN\_3315: q=30 alpha=8 beta=4 bp=45



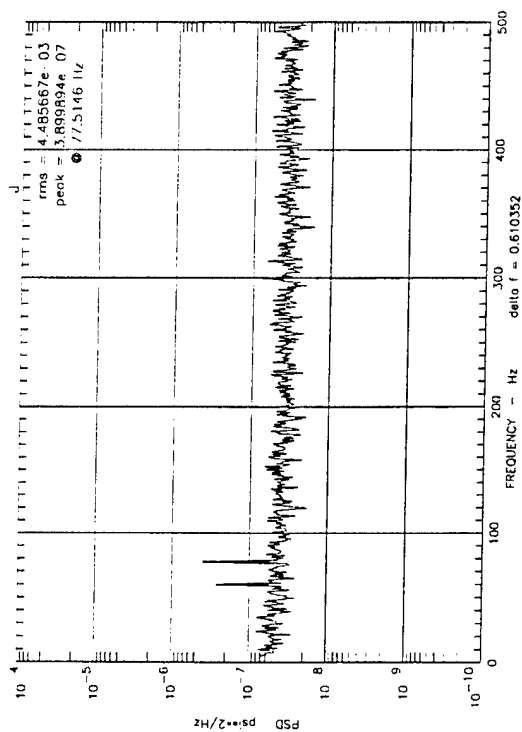
F 15 TPN\_3315: q=30 alpha=8 beta=4 bp=45



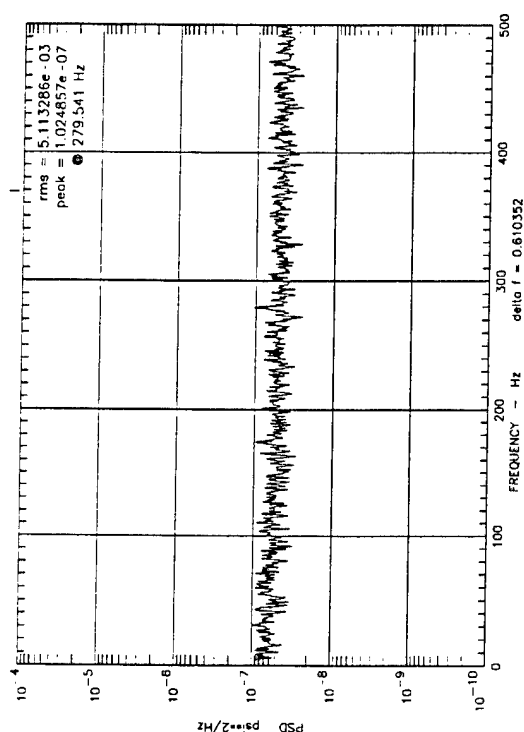
F 15 TPN\_3315: q=30 alpha=8 beta=4 bp=45



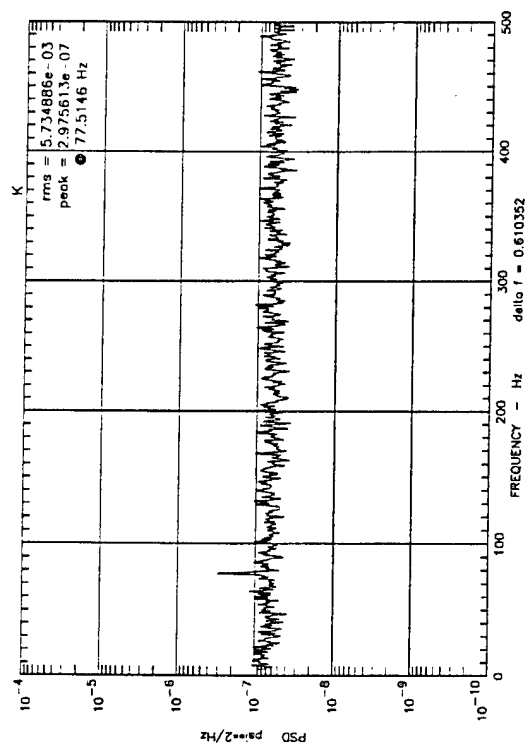
F-15 TPN\_3315: q=30 alpha=8 beta=4 bp=45



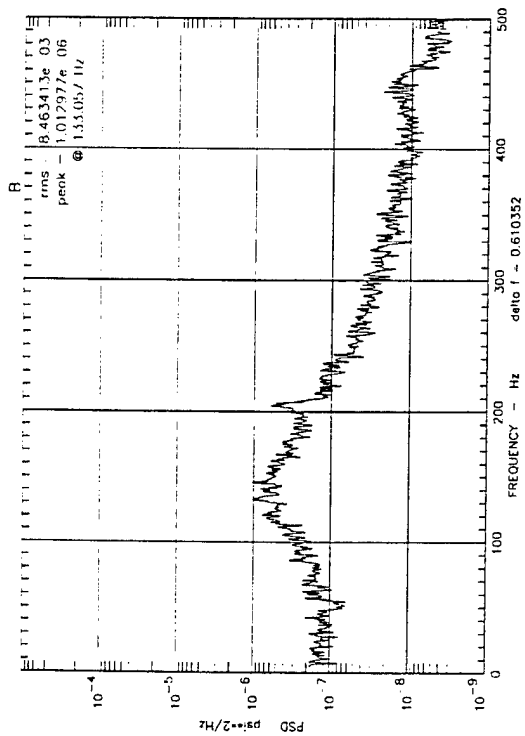
F-15 TPN\_3315: q=30 alpha=8 beta=4 bp=45



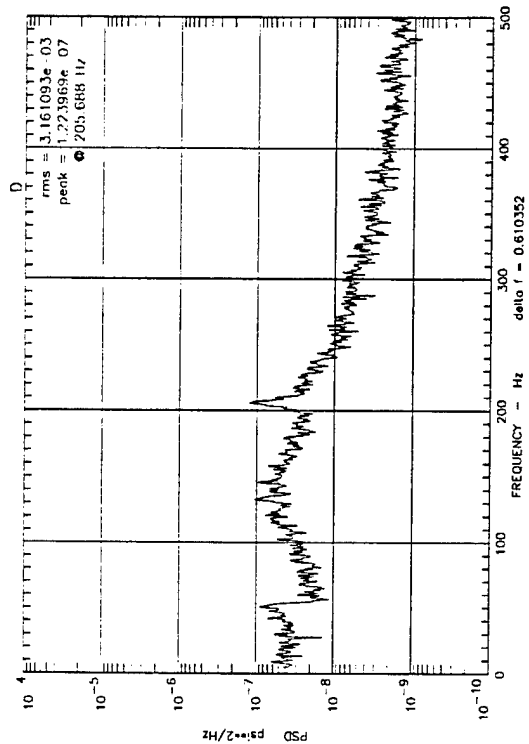
F-15 TPN\_3315: q=30 alpha=8 beta=4 bp=45



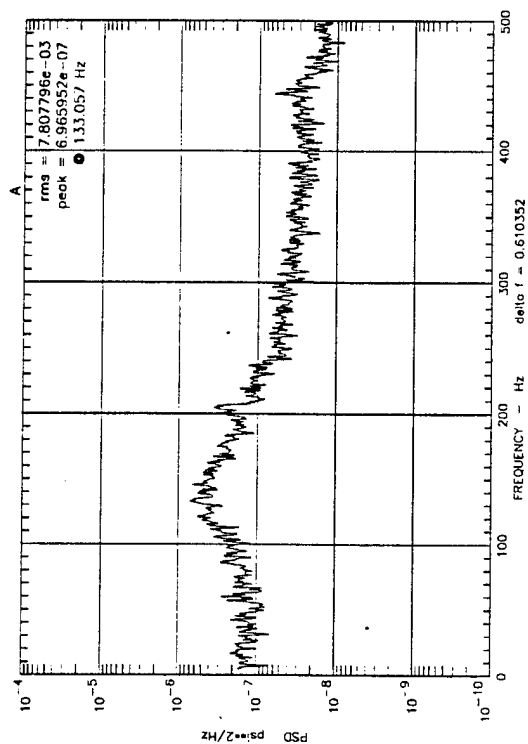
F-15 TPN\_3321: q=30 alpha=20 beta=4 bp=45



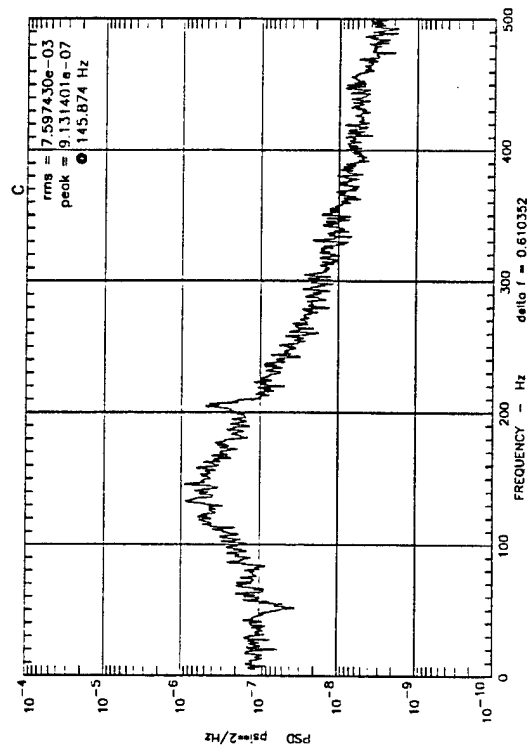
F-15 TPN\_3321: q=30 alpha=20 beta=4 bp=45



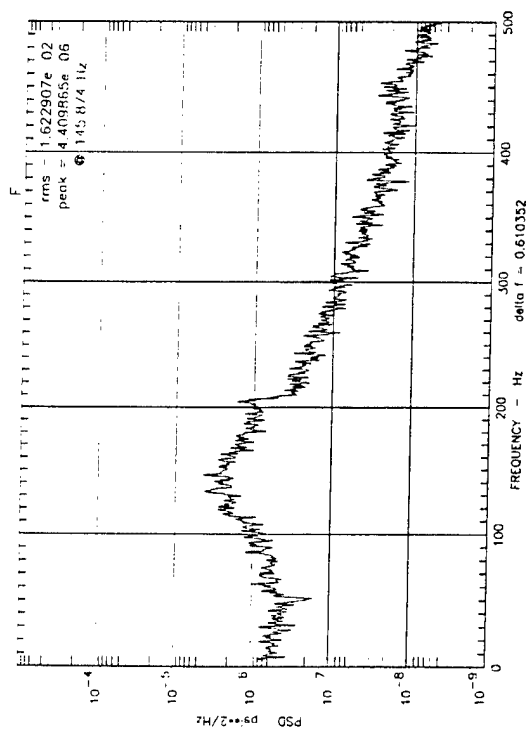
F-15 TPN\_3321: q=30 alpha=20 beta=4 bp=45



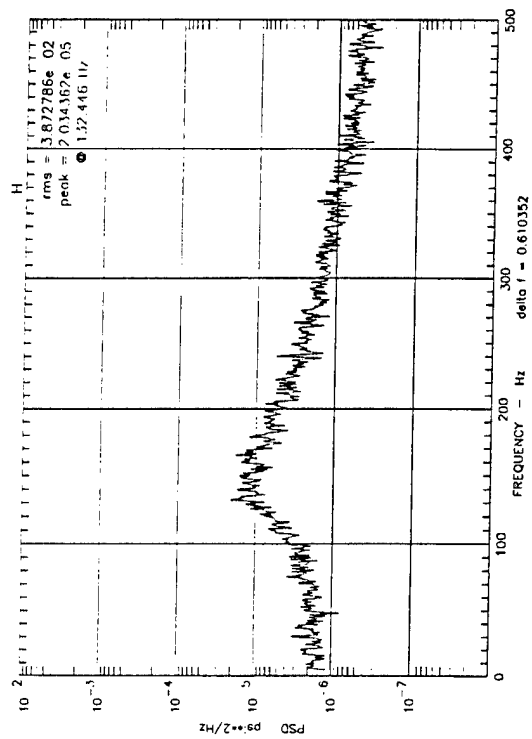
F-15 TPN\_3321: q=30 alpha=20 beta=4 bp=45



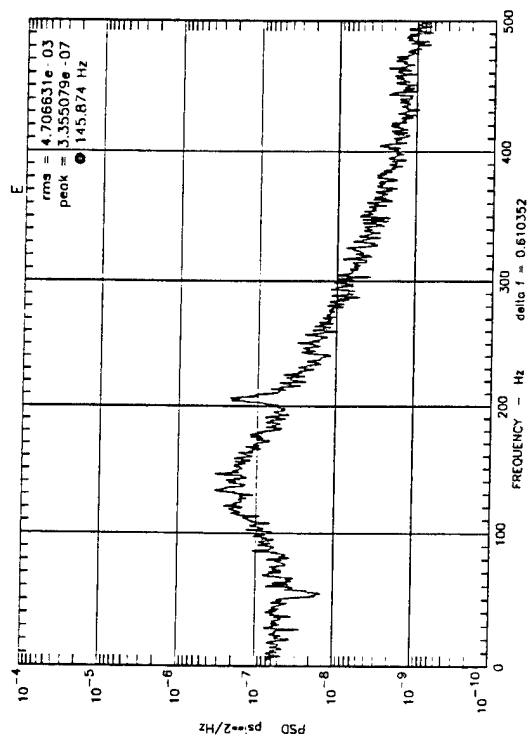
F-15 TPN\_3321: q=30 alpha=20 beta=4 bp=45



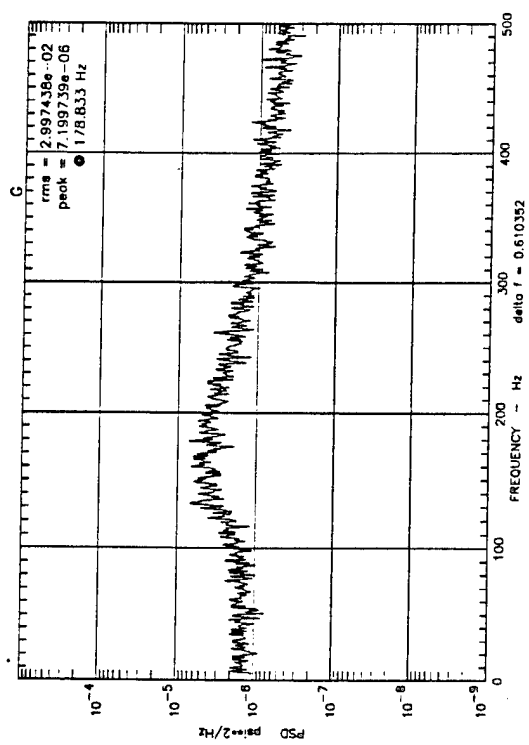
F-15 TPN\_3321: q=30 alpha=20 beta=4 bp=45

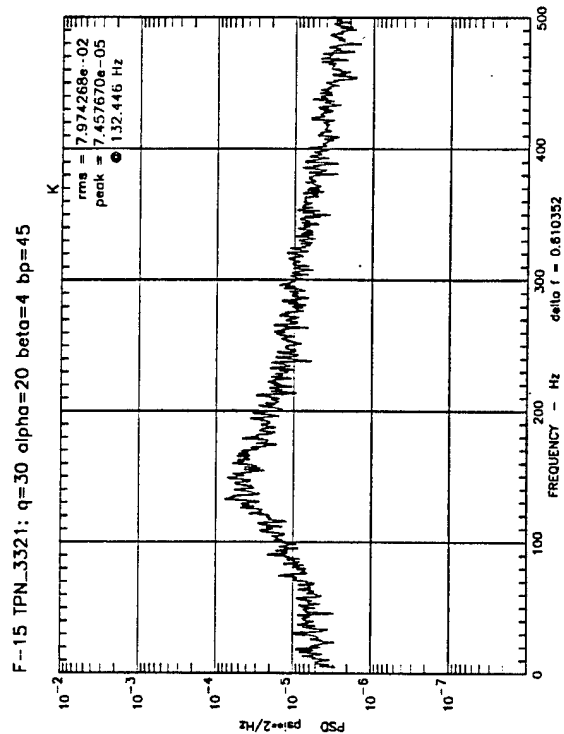
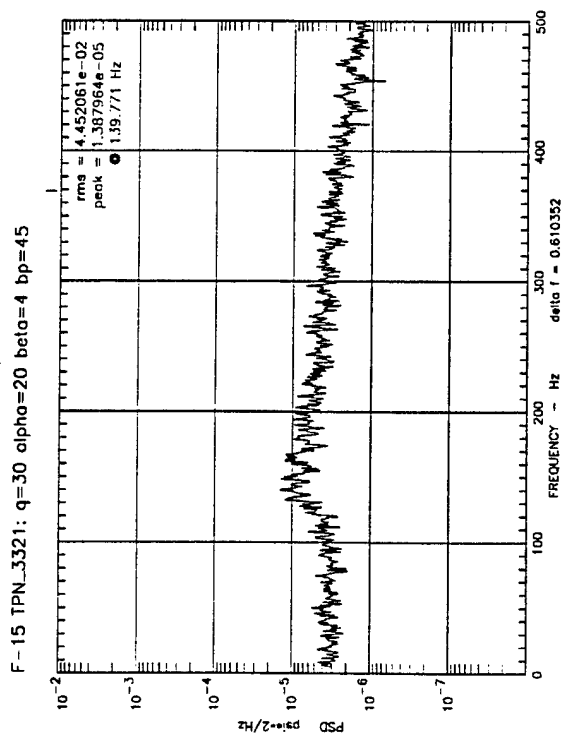
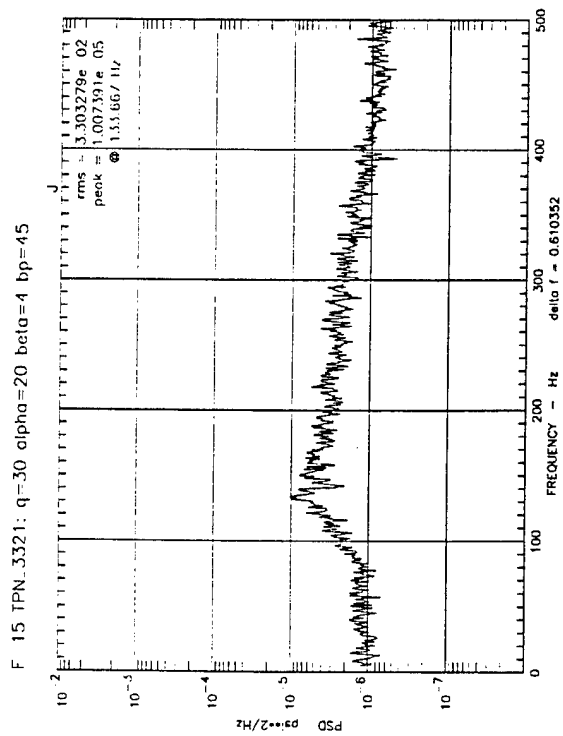


F-15 TPN\_3321: q=30 alpha=20 beta=4 bp=45

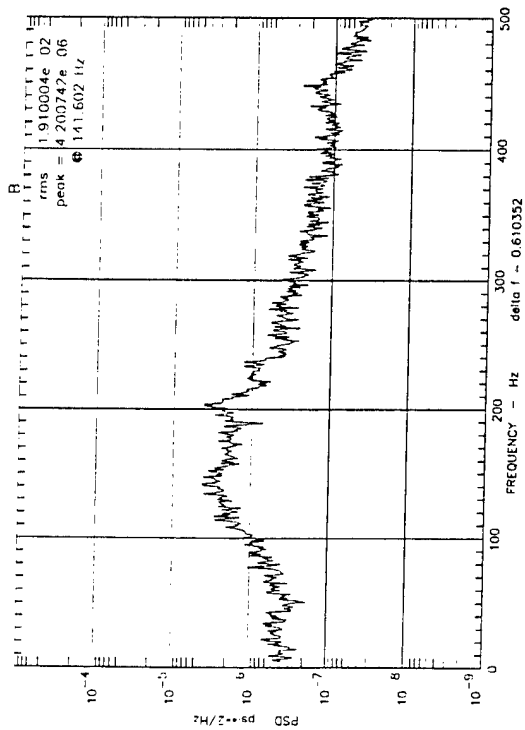


F-15 TPN\_3321: q=30 alpha=20 beta=4 bp=45

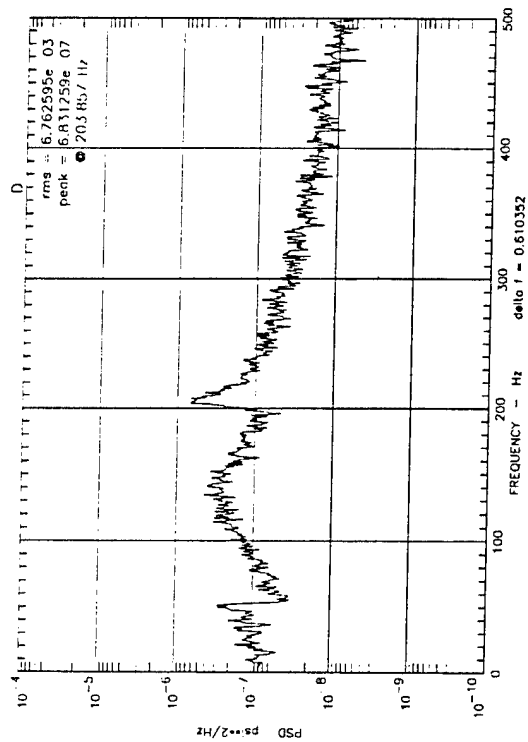




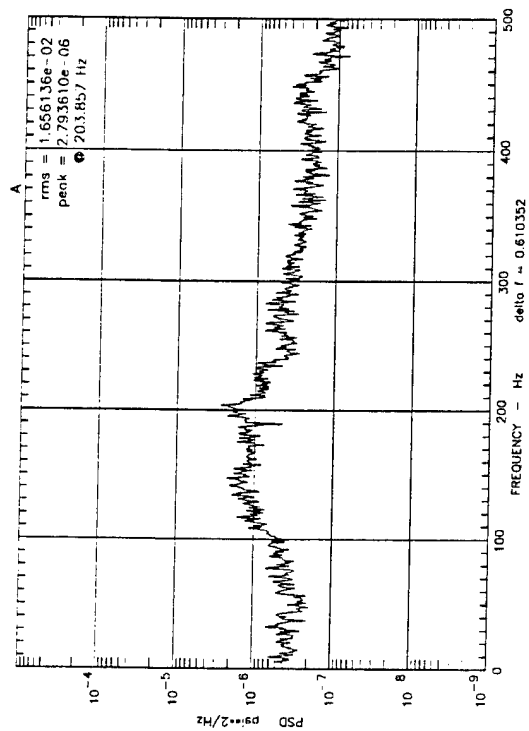
F 15 TPN .3323: q=30 alpha=24 beta=4 bp=45



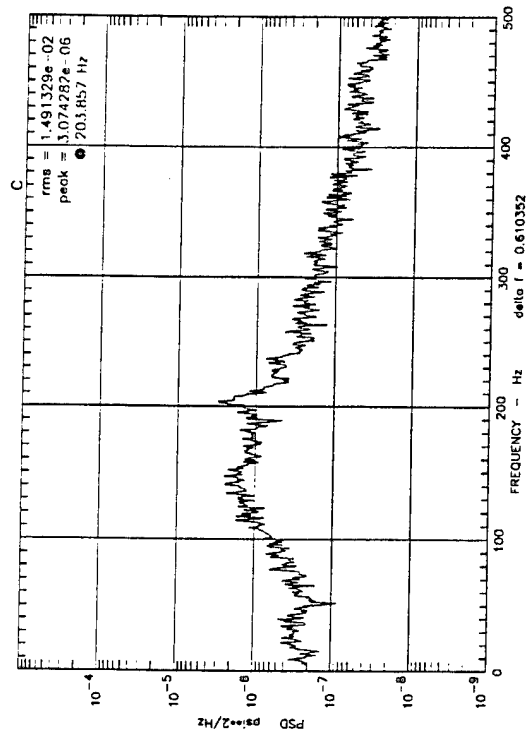
F 15 TPN .3323: q=30 alpha=24 beta=4 bp=45



F 15 TPN .3323: q=30 alpha=24 beta=4 bp=45

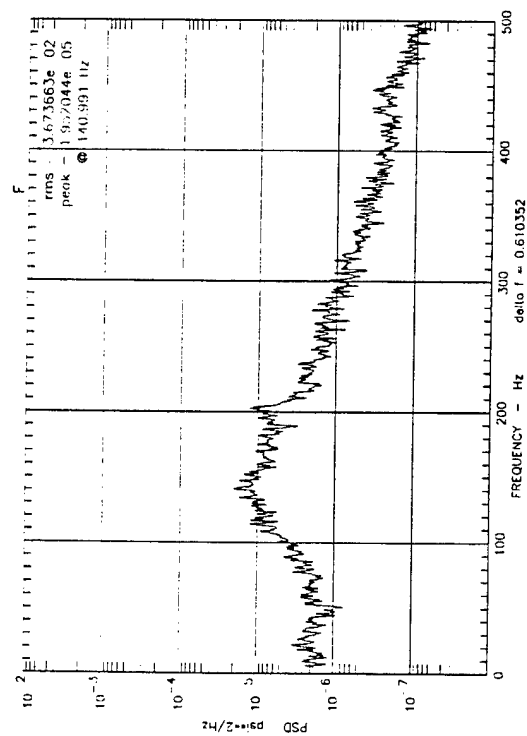


F 15 TPN .3323: q=30 alpha=24 beta=4 bp=45

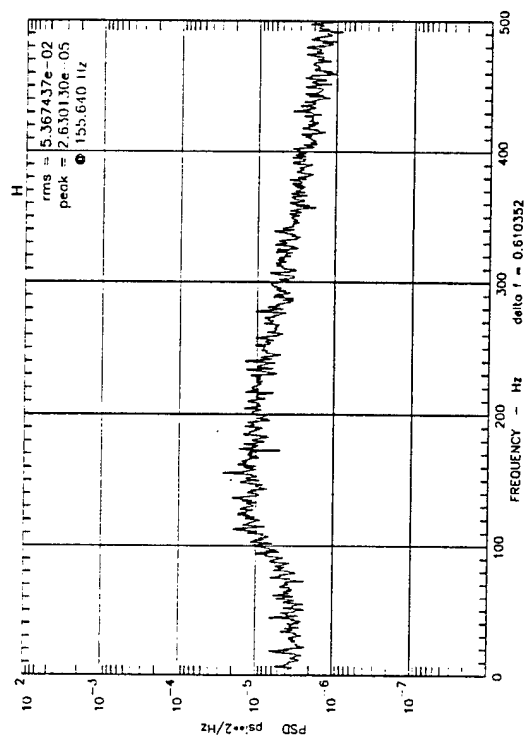




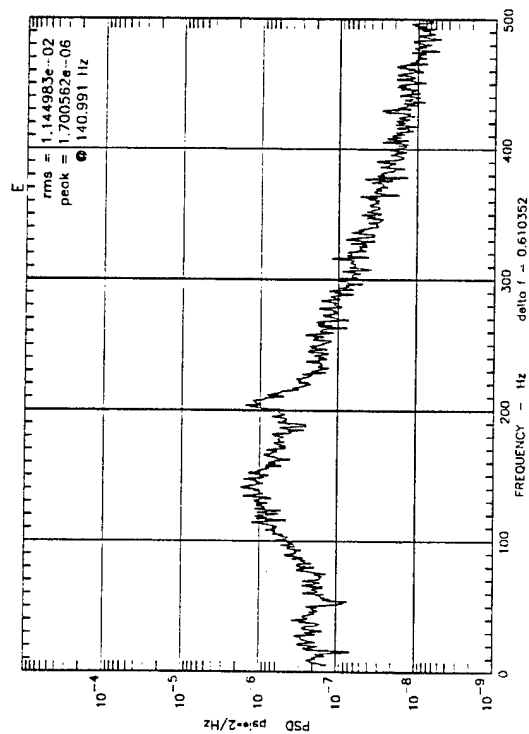
F-15 TPN\_3323; q=30 alpha=24 beta=4 bp=45



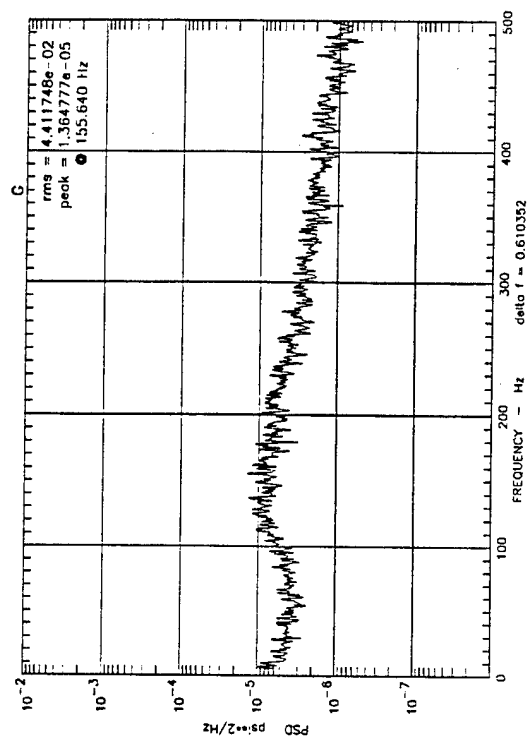
F-15 TPN\_3323; q=30 alpha=24 beta=4 bp=45



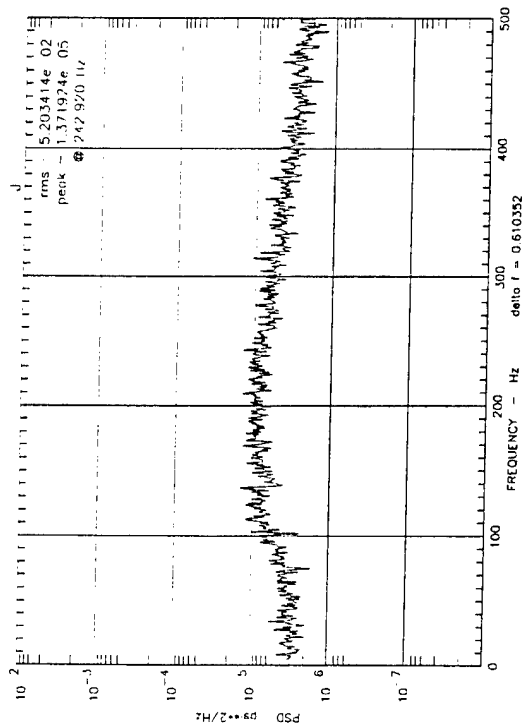
F-15 TPN\_3323; q=30 alpha=24 beta=4 bp=45



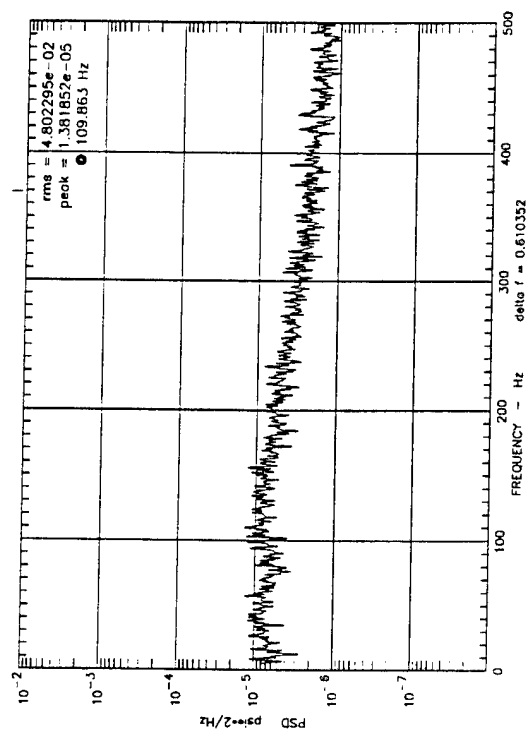
F-15 TPN\_3323; q=30 alpha=24 beta=4 bp=45



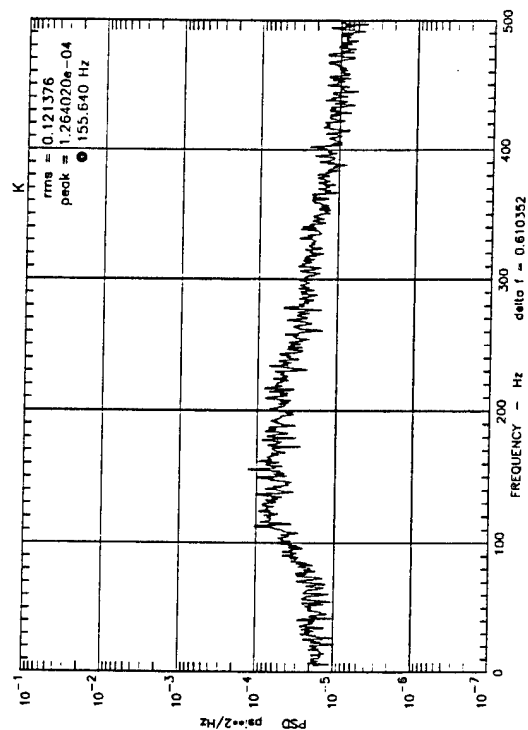
F-15 TPN\_3323: q=30 alpha=24 beta=4 bp=45



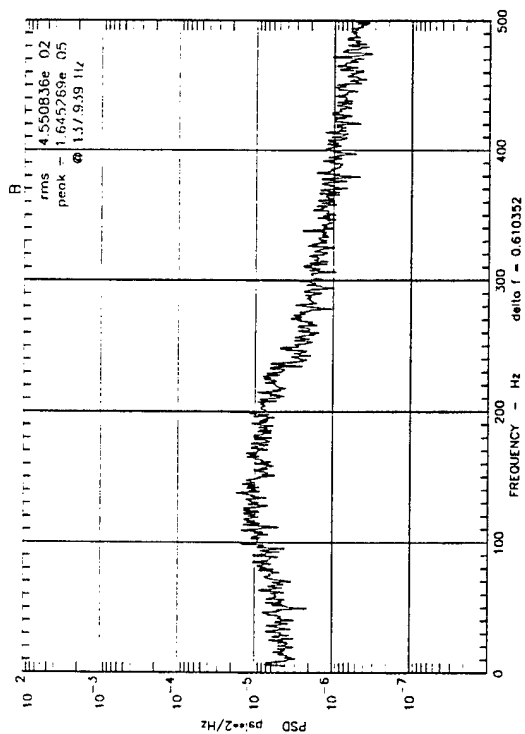
F-15 TPN\_3323: q=30 alpha=24 beta=4 bp=45



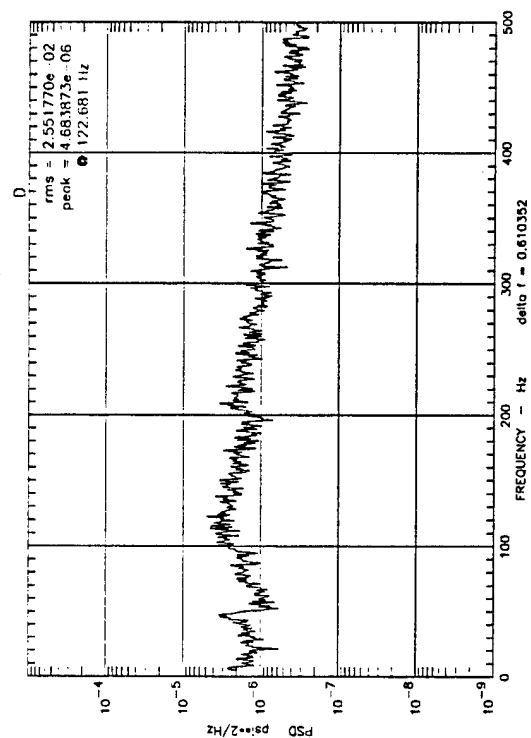
F-15 TPN\_3323: q=30 alpha=24 beta=4 bp=45



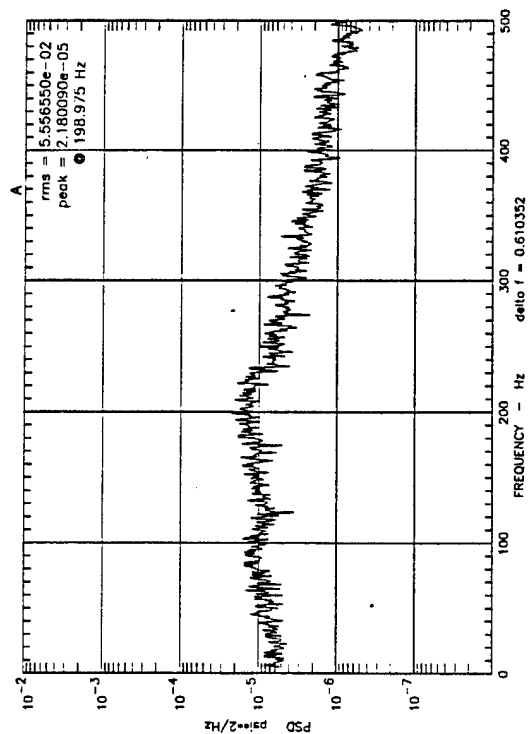
F 15 TPN .3325: q=30 alpha=32 beta=4 bp=45



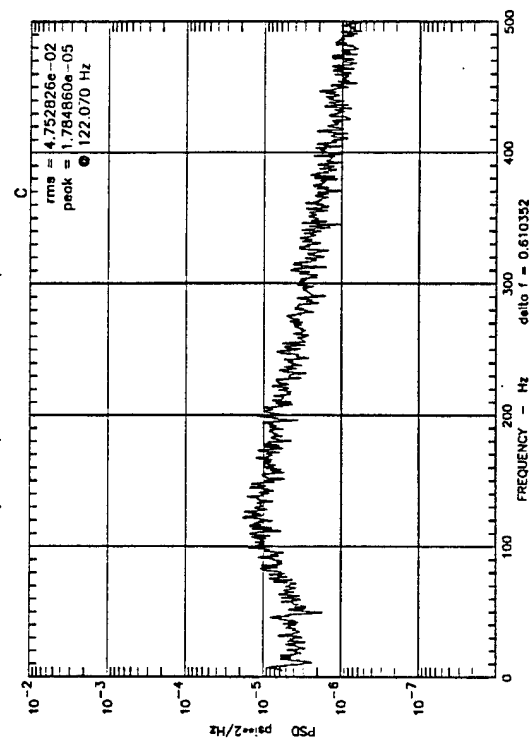
F -15 TPN .3325: q=30 alpha=32 beta=4 bp=45



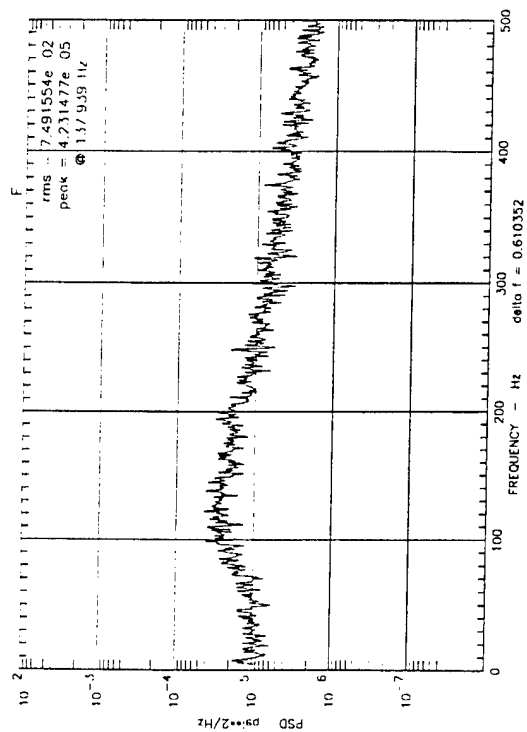
F-15 TPN .3325: q=30 alpha=32 beta=4 bp=45



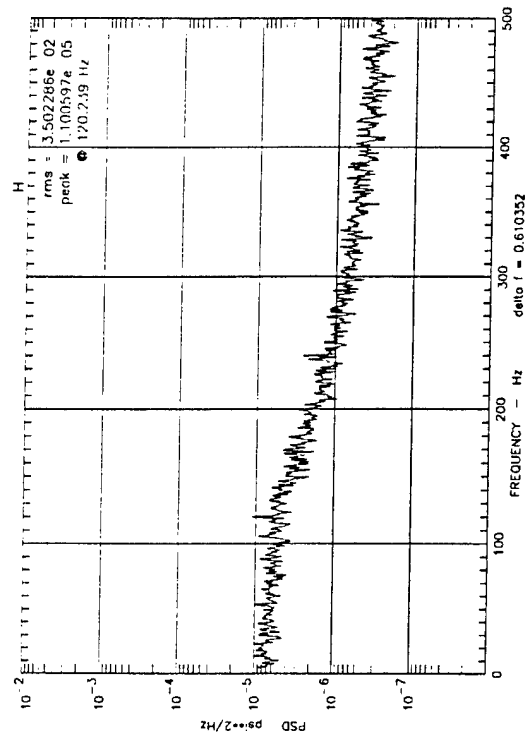
F -15 TPN .3325: q=30 alpha=32 beta=4 bp=45



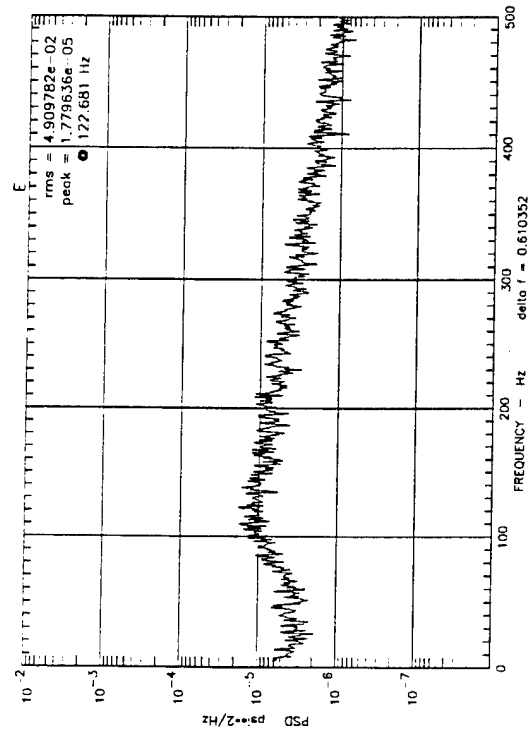
F 15 TPN 3325: q=30 alpha=32 beta=4 bp=45



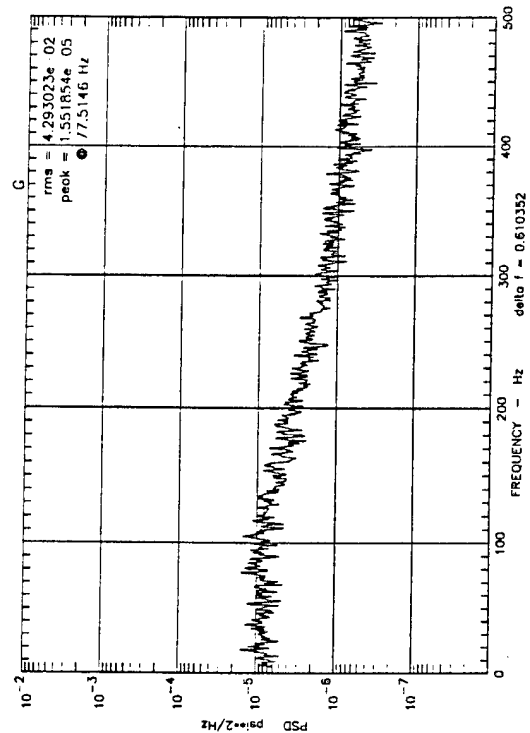
F 15 TPN 3325: q=30 alpha=32 beta=4 bp=45



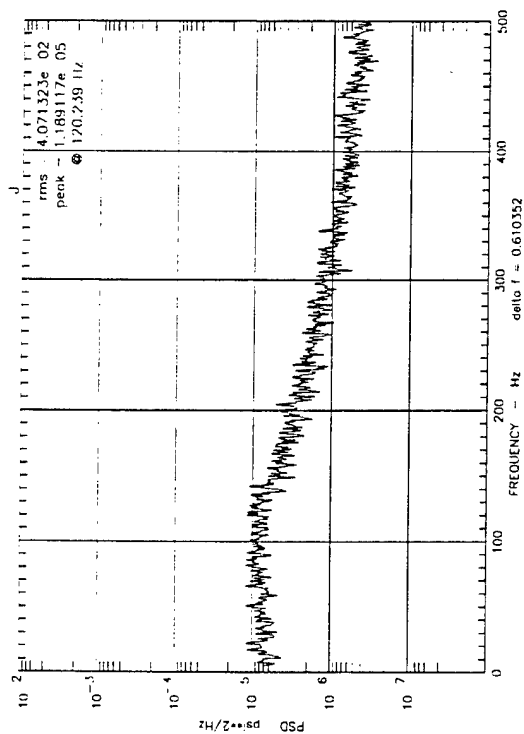
F 15 TPN 3325: q=30 alpha=32 beta=4 bp=45



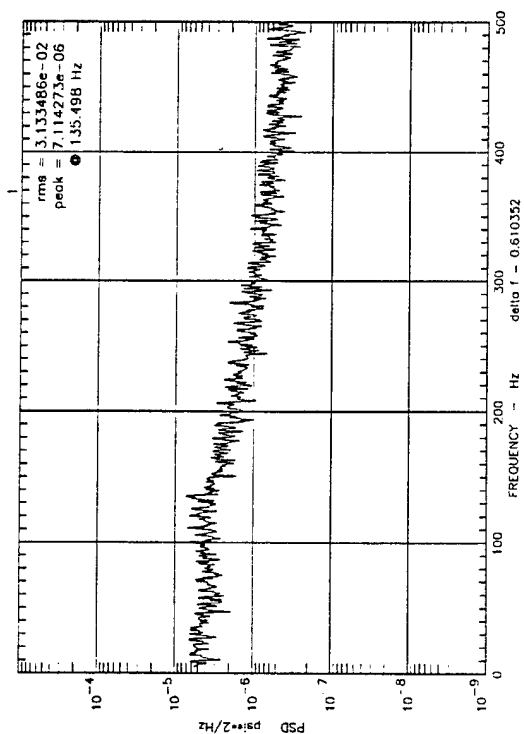
F 15 TPN 3325: q=30 alpha=32 beta=4 bp=45



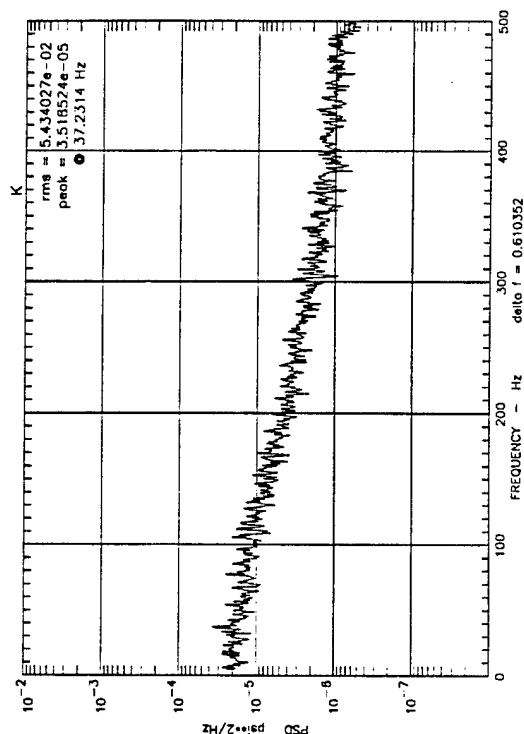
F-15 TPN\_3325: q=30 alpha=32 beta=4 bp=45



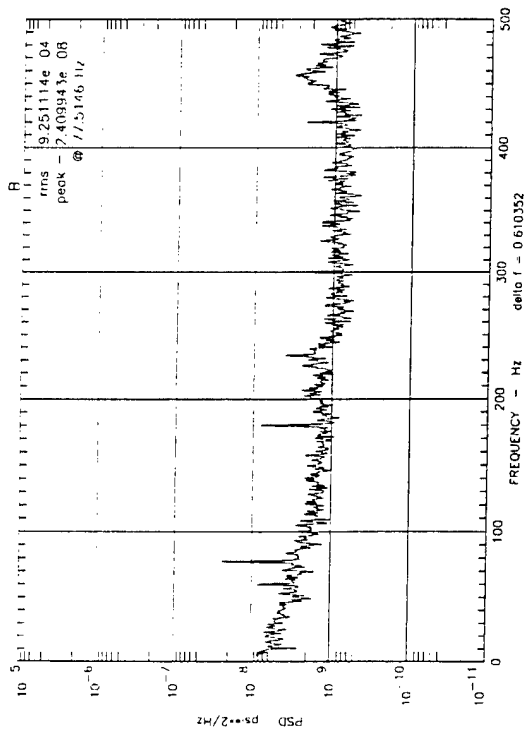
F-15 TPN\_3325: q=30 alpha=32 beta=4 bp=45



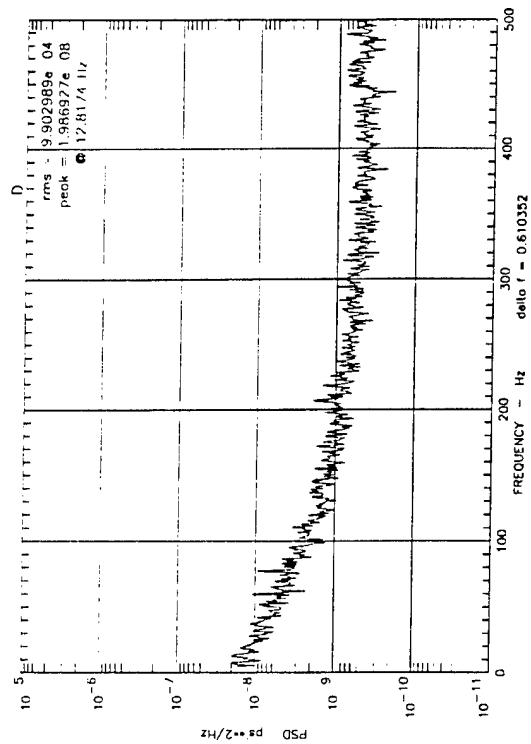
F-15 TPN\_3325: q=30 alpha=32 beta=4 bp=45



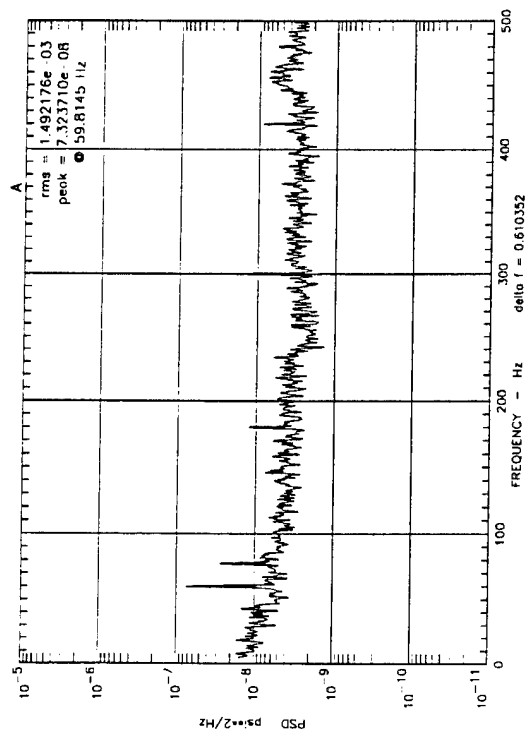
F 15 TPN 3279: q=30 alpha=8 beta=0 bp=45



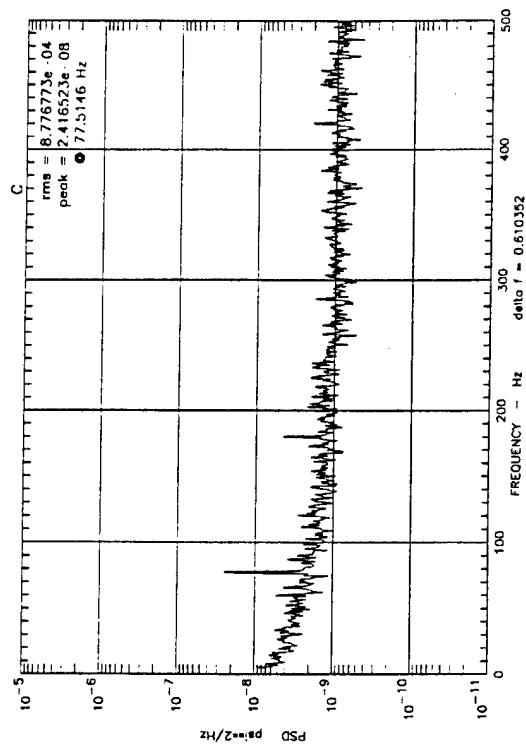
F 15 TPN 3279: q=30 alpha=8 beta=0 bp=45



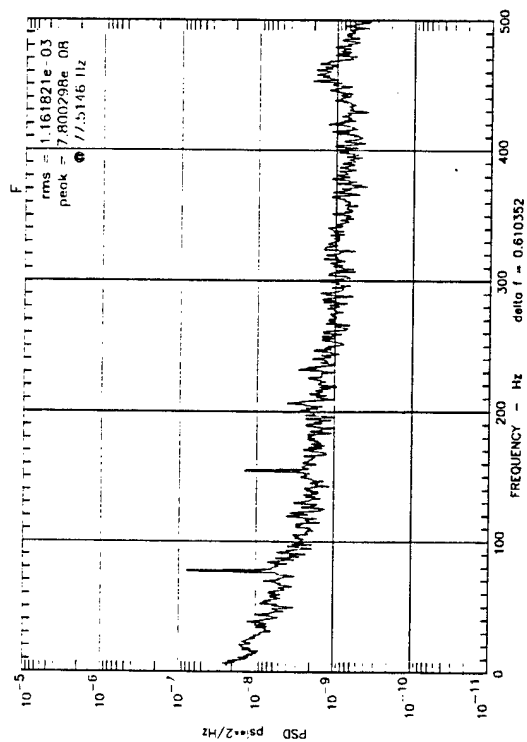
F 15 TPN 3279: q=30 alpha=8 beta=0 bp=45



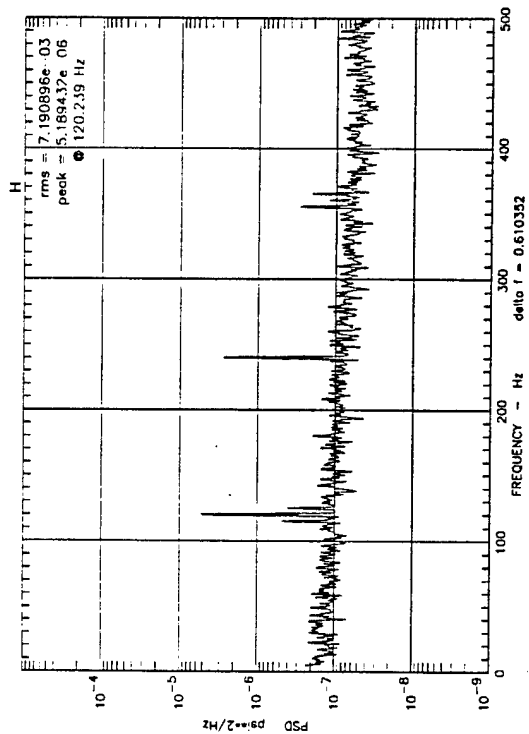
F 15 TPN 3279: q=30 alpha=8 beta=0 bp=45



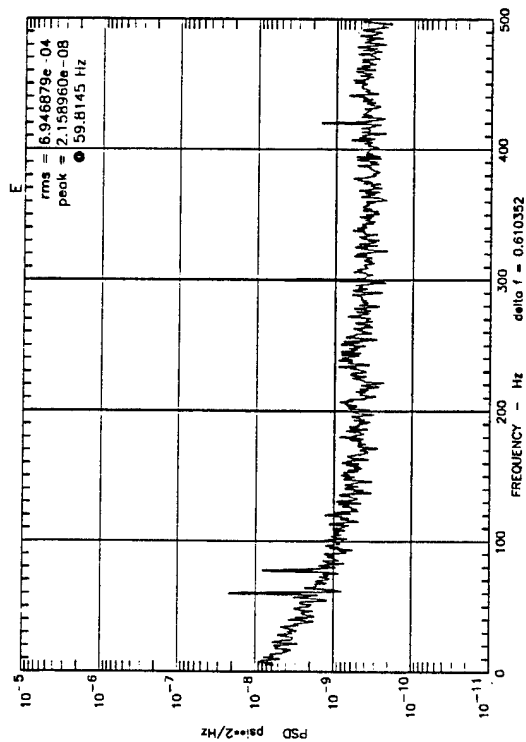
F-15 TPN\_3279: q=30 alpha=8 beta=0 bp=45



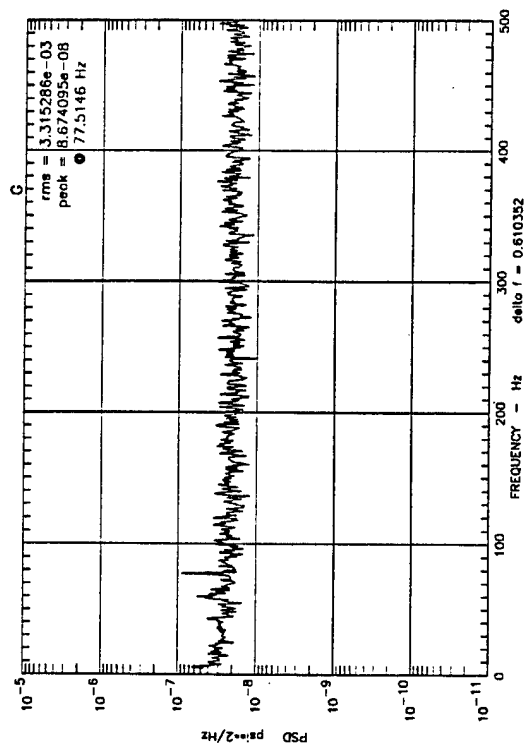
F-15 TPN\_3279: q=30 alpha=8 beta=0 bp=45



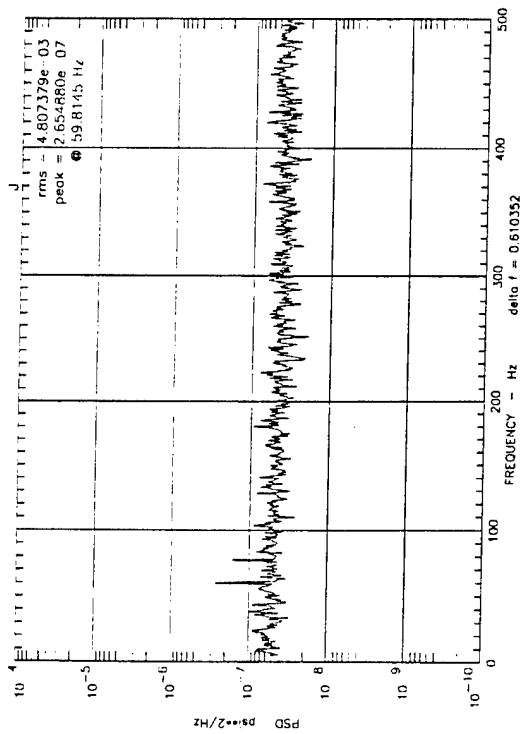
F-15 TPN\_3279: q=30 alpha=8 beta=0 bp=45



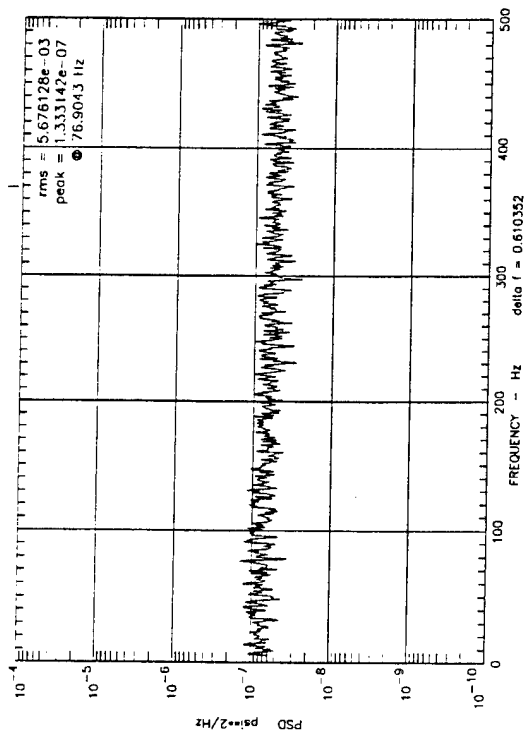
F-15 TPN\_3279: q=30 alpha=8 beta=0 bp=45



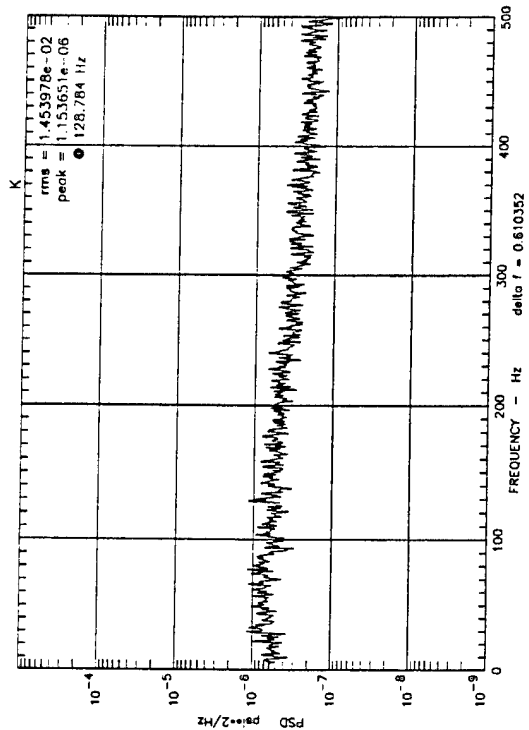
F-15 TPN\_3279: q=30 alpha=8 beta=0 bp=45



F-15 TPN\_3279: q=30 alpha=8 beta=0 bp=45

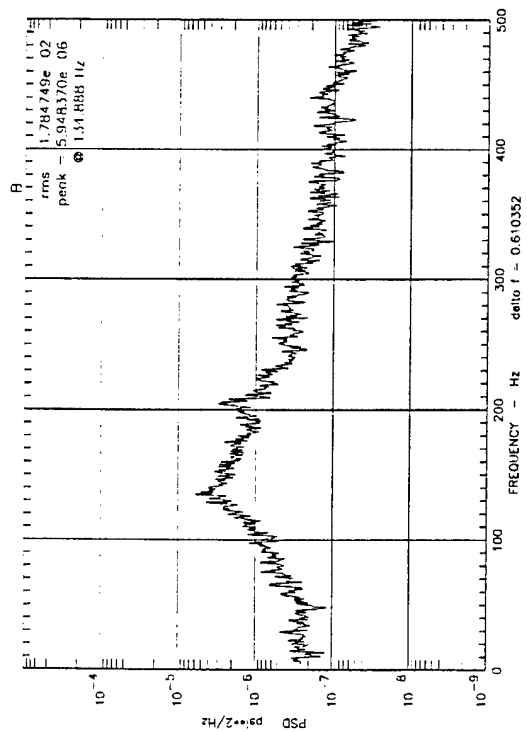


F-15 TPN\_3279: q=30 alpha=8 beta=0 bp=45

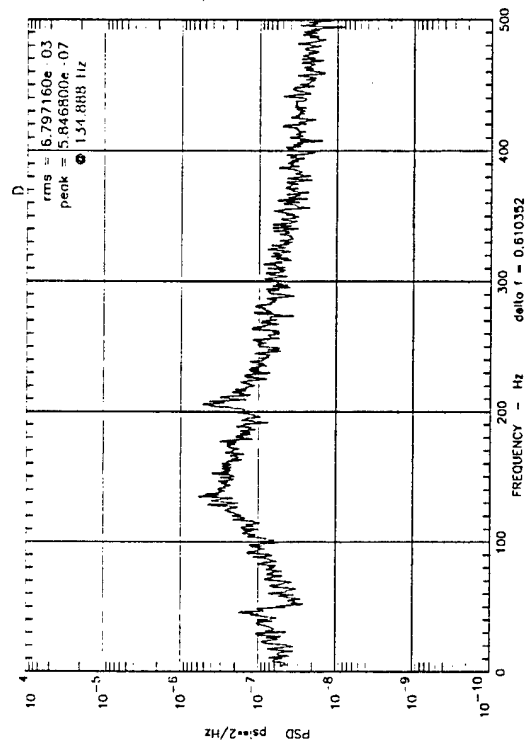




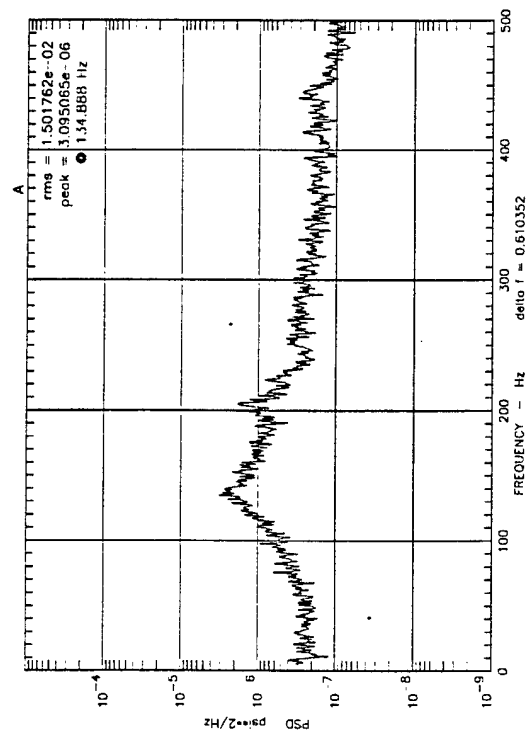
F-15 TPN\_3285: q=30 alpha=20 beta=0 bp=45



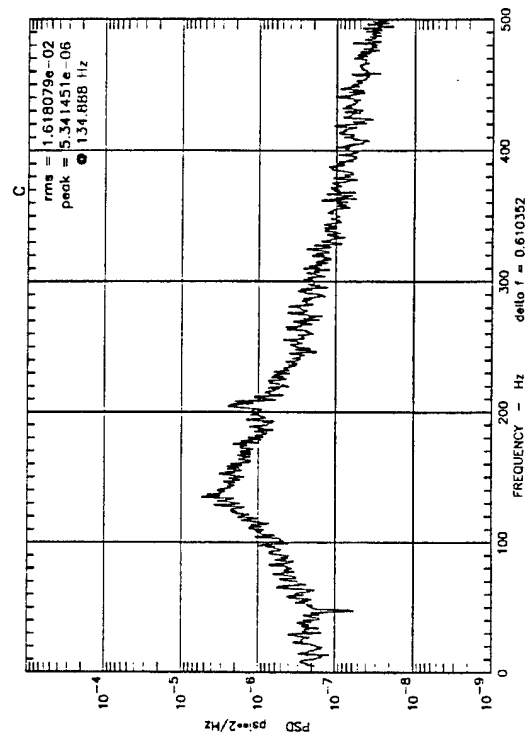
F-15 TPN\_3285: q=30 alpha=20 beta=0 bp=45



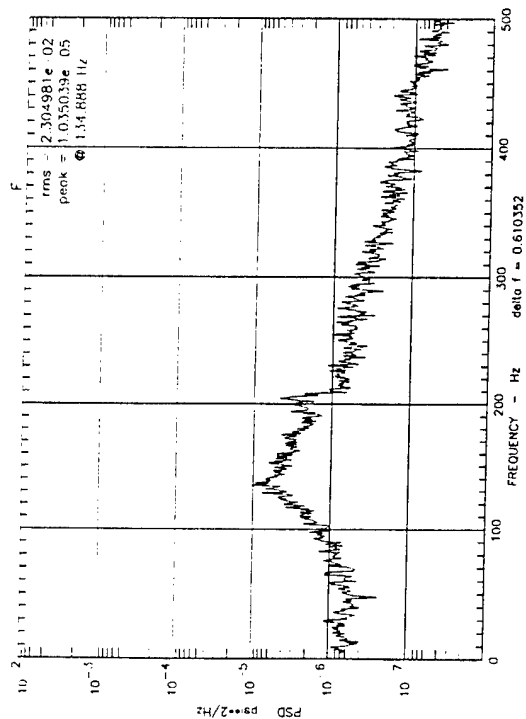
F-15 TPN\_3285: q=30 alpha=20 beta=0 bp=45



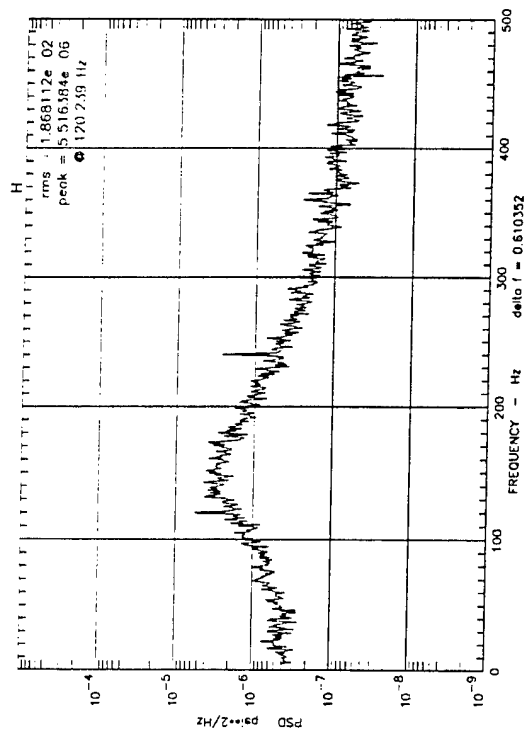
F-15 TPN\_3285: q=30 alpha=20 beta=0 bp=45



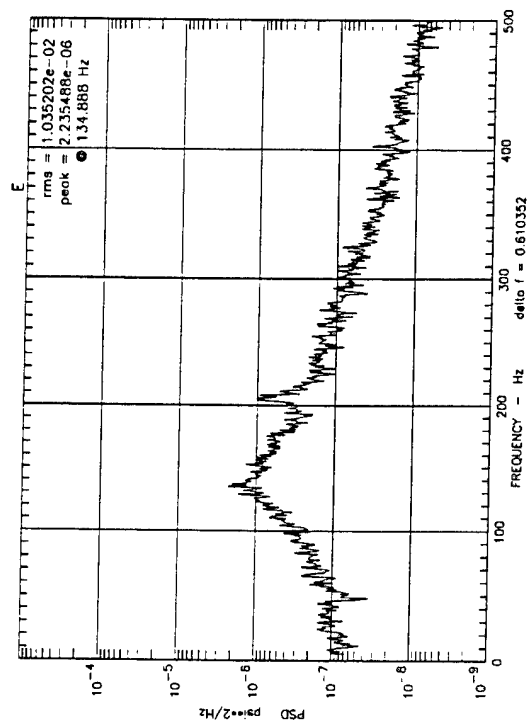
F-15 TPN\_3285: q=30 alpha=20 beta=0 bp=45



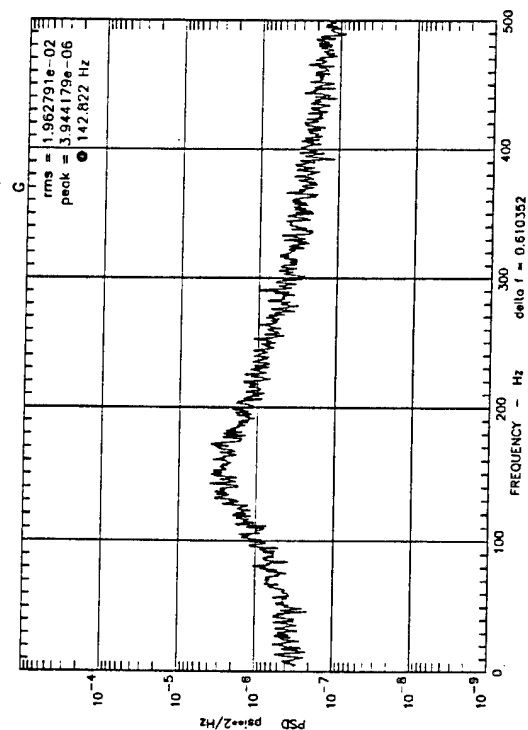
F-15 TPN\_3285: q=30 alpha=20 beta=0 bp=45



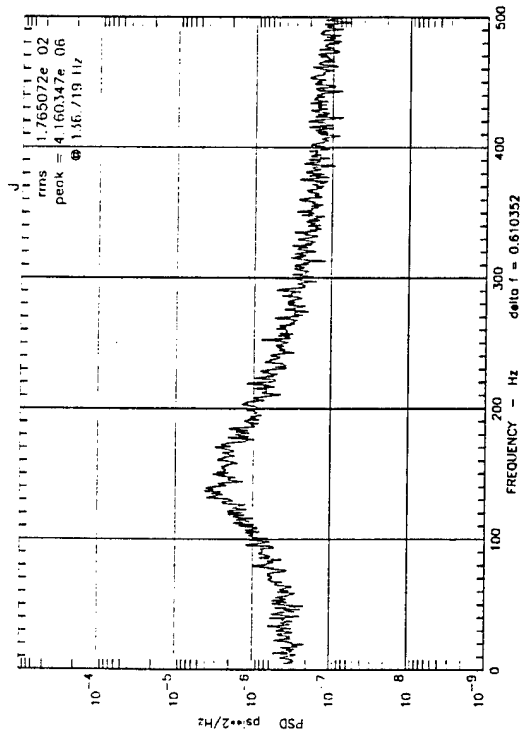
F-15 TPN\_3285: q=30 alpha=20 beta=0 bp=45



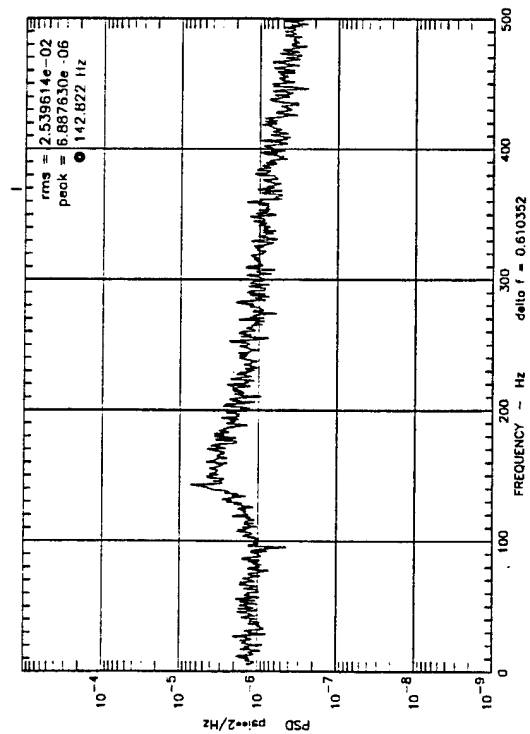
F-15 TPN\_3285: q=30 alpha=20 beta=0 bp=45



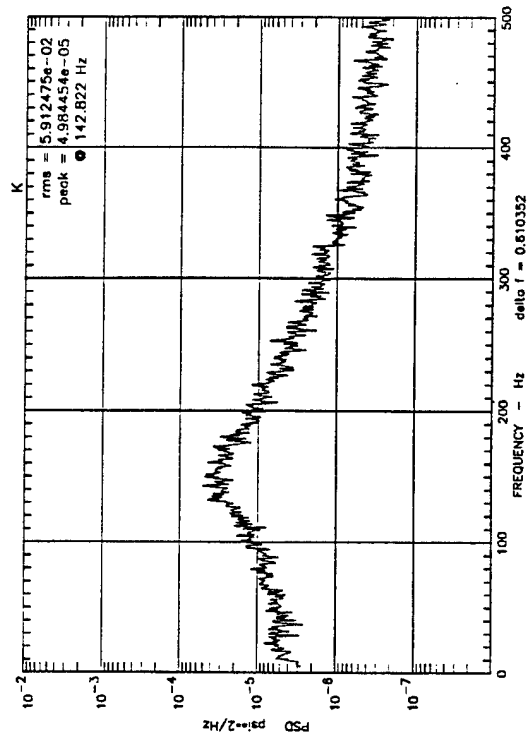
F-15 TPN\_3285: q=30 alpha=20 beta=0 bp=45



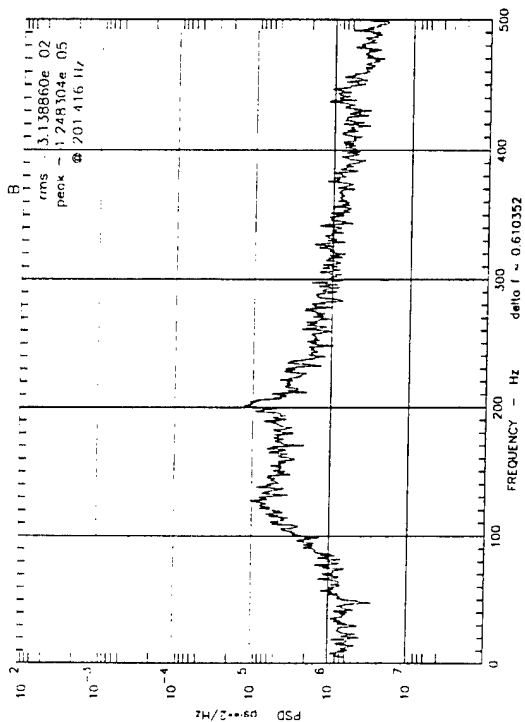
F-15 TPN\_3285: q=30 alpha=20 beta=0 bp=45



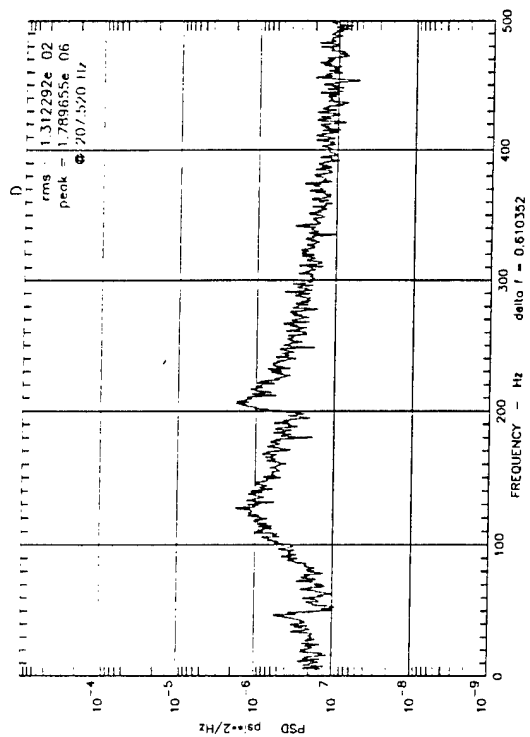
F-15 TPN\_3285: q=30 alpha=20 beta=0 bp=45



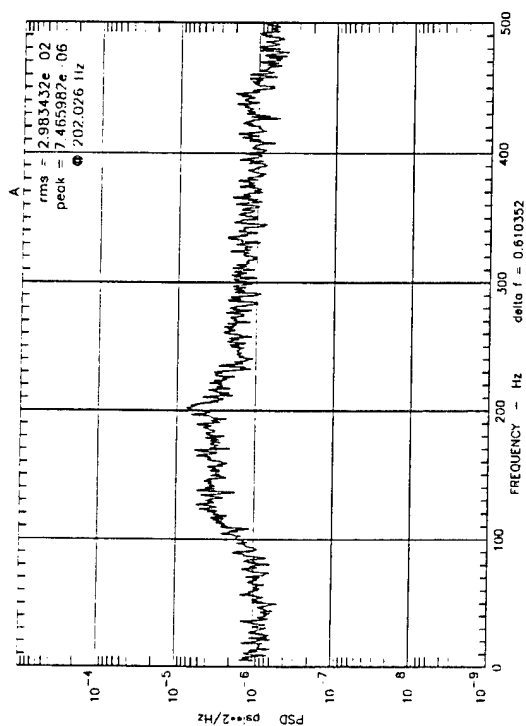
F 15 TPN 3287: q=30 alpha=24 beta=0 bp=45



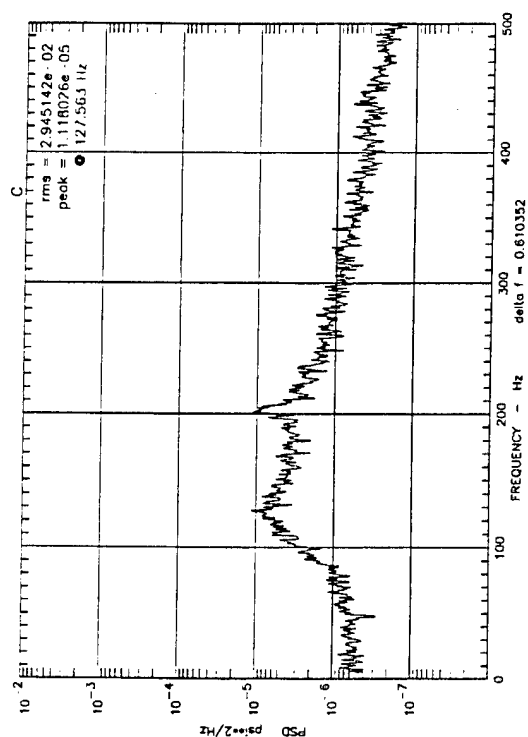
F 15 TPN 3287: q=30 alpha=24 beta=0 bp=45



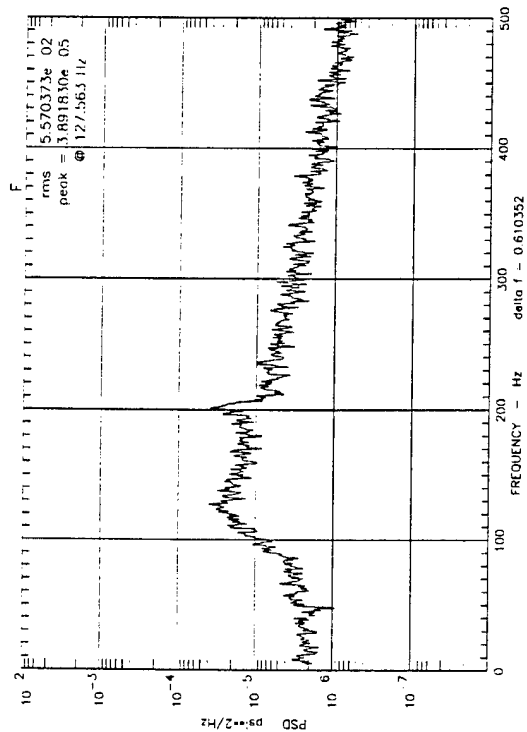
F 15 TPN 3287: q=30 alpha=24 beta=0 bp=45



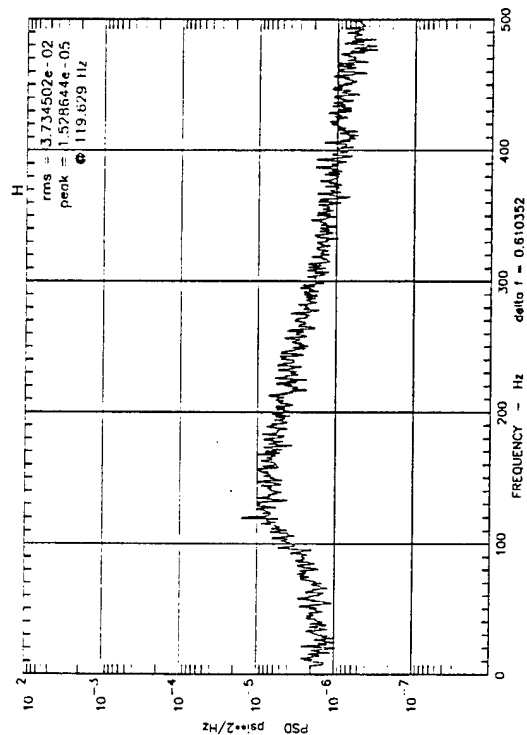
F 15 TPN 3287: q=30 alpha=24 beta=0 bp=45



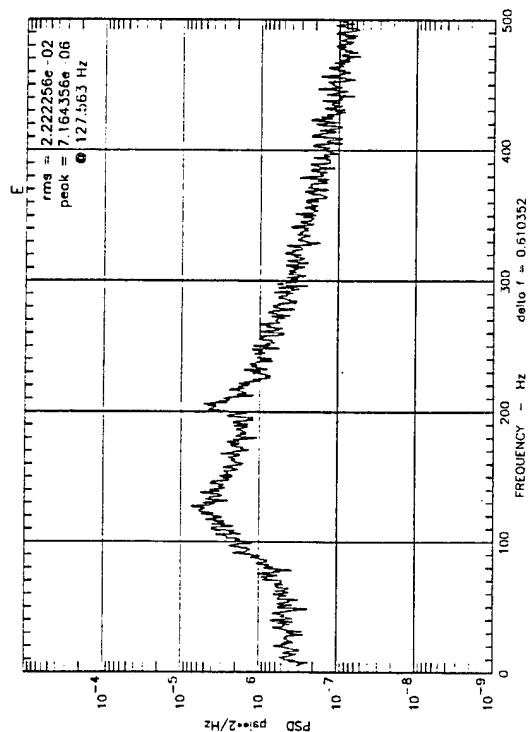
F 15 TPN 3287: q=30 alpha=24 beta=0 bp=45



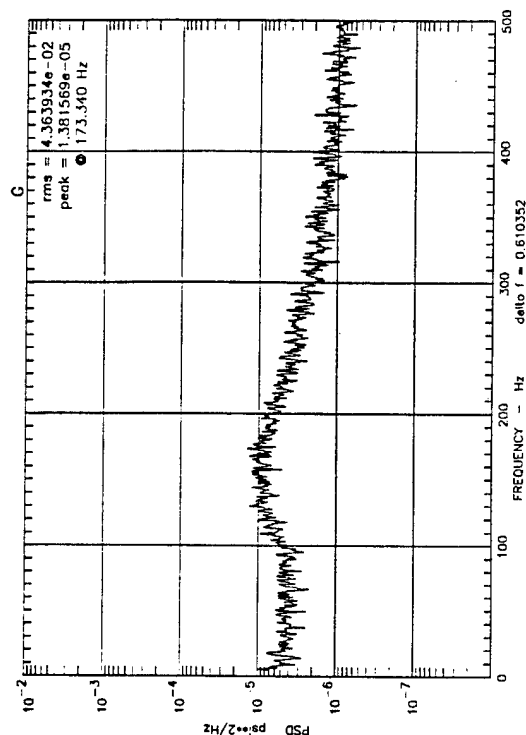
F 15 TPN 3287: q=30 alpha=24 beta=0 bp=45



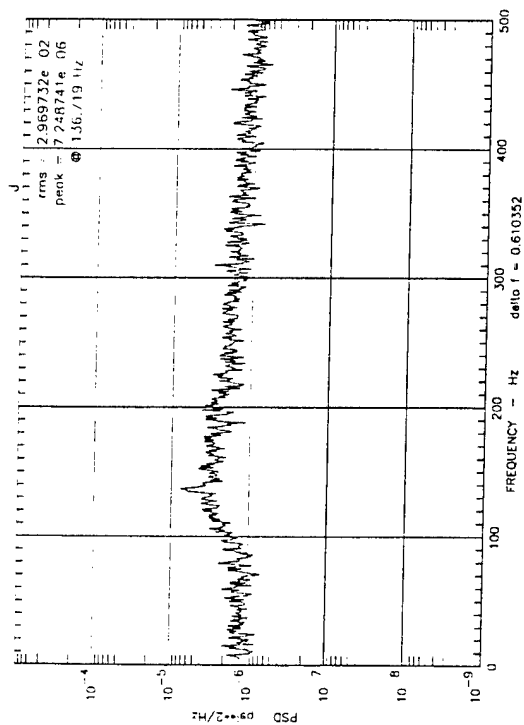
F 15 TPN 3287: q=30 alpha=24 beta=0 bp=45



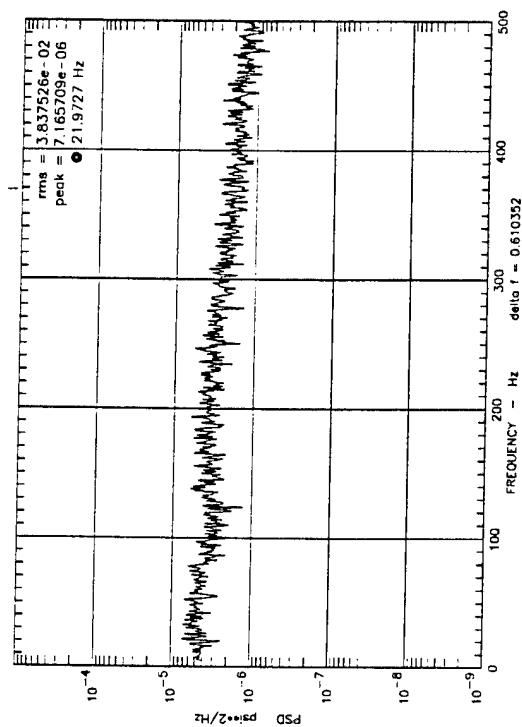
F 15 TPN 3287: q=30 alpha=24 beta=0 bp=45



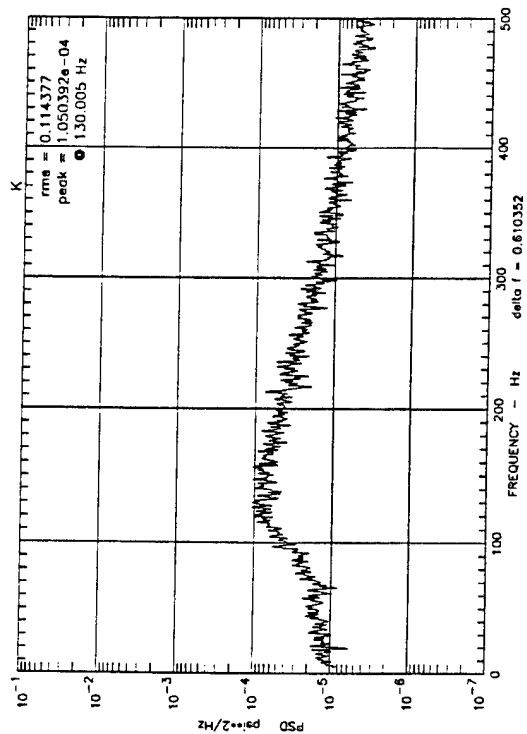
F-15 TPN\_3287: q=30 alpha=24 beta=0 bp=45



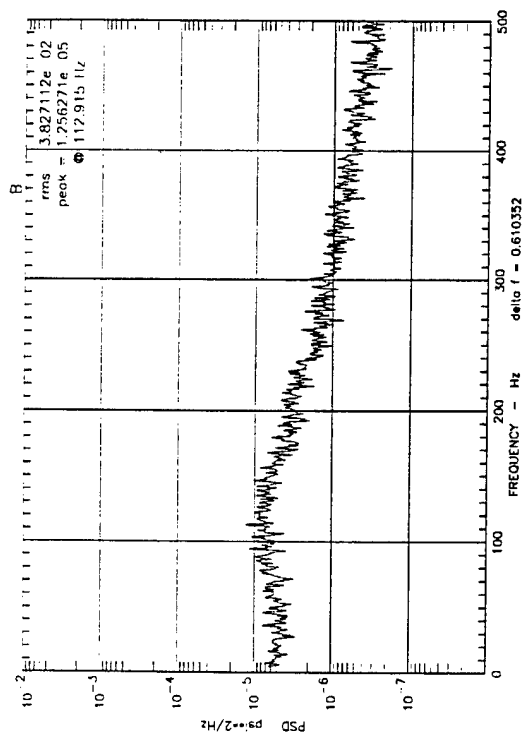
F-15 TPN\_3287: q=30 alpha=24 beta=0 bp=45



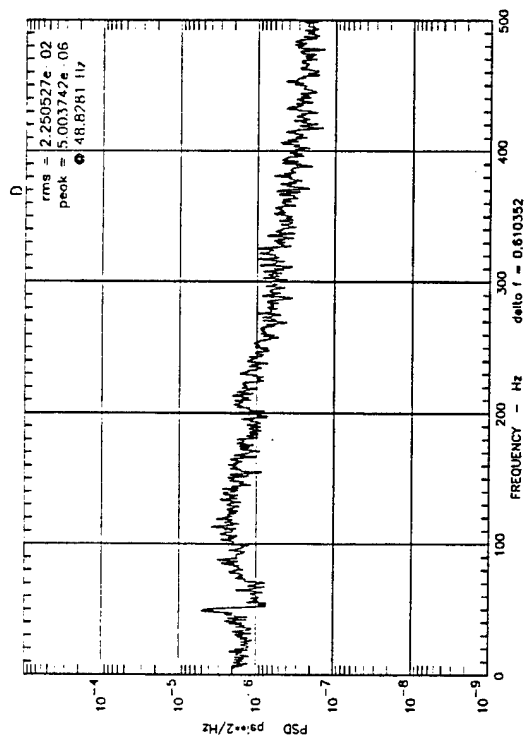
F-15 TPN\_3287: q=30 alpha=24 beta=0 bp=45



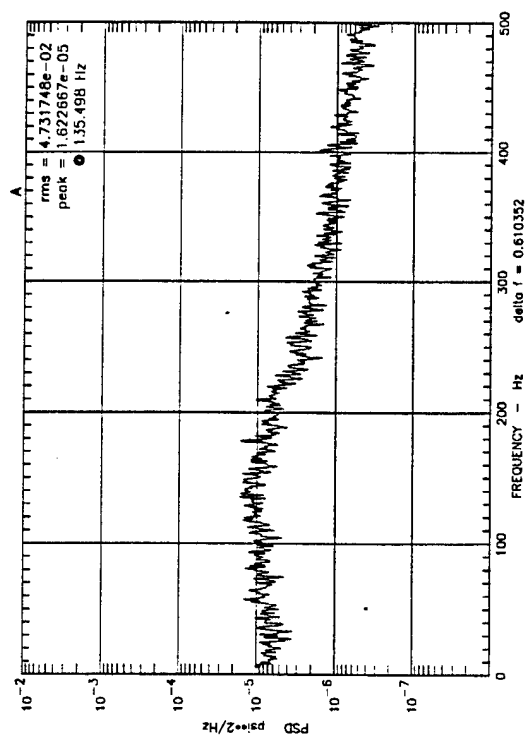
F 15 TPN 3289: q=30 alpha=32 beta=0 bp=45



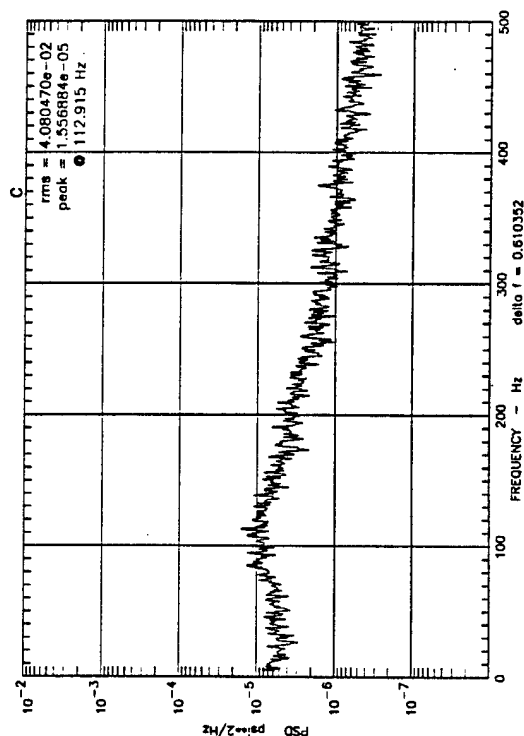
F-15 TPN 3289: q=30 alpha=32 beta=0 bp=45



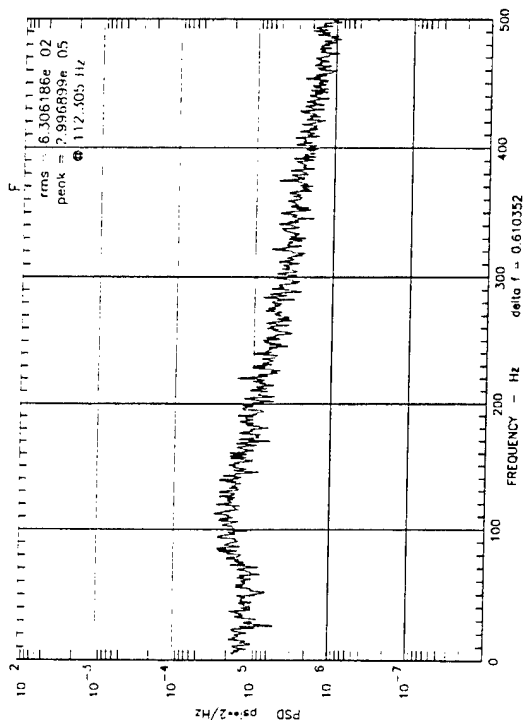
F-15 TPN 3289: q=30 alpha=32 beta=0 bp=45



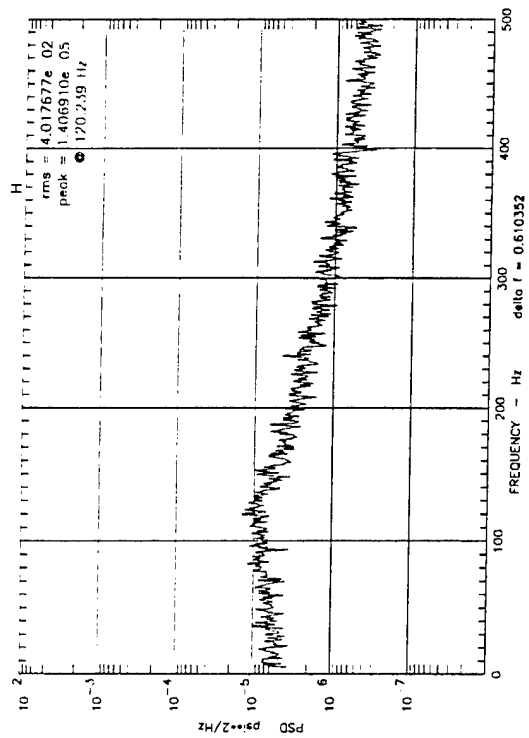
F-15 TPN 3289: q=30 alpha=32 beta=0 bp=45



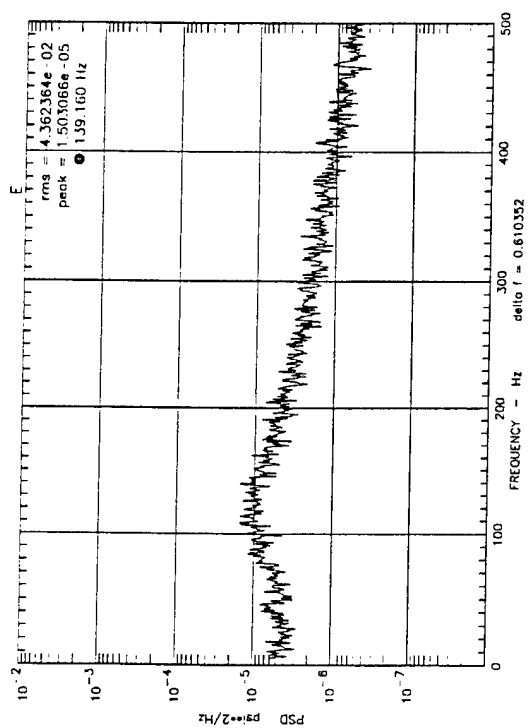
F-15 TPN\_3289: q=30 alpha=32 beta=0 bp=45



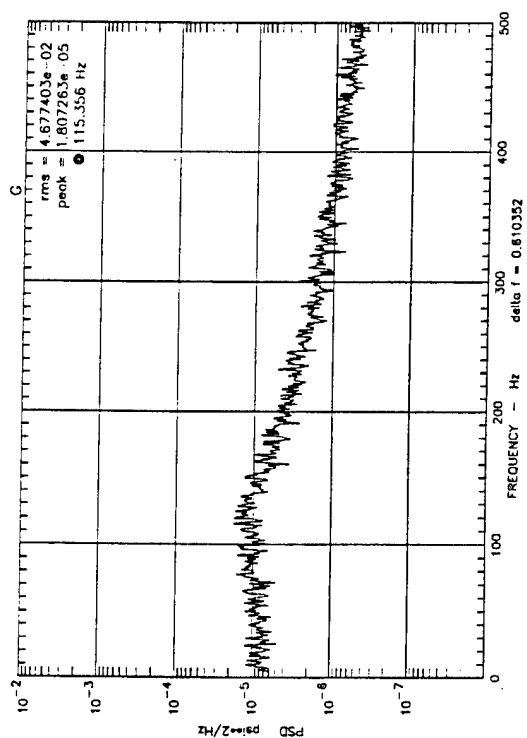
F-15 TPN\_3289: q=30 alpha=32 beta=0 bp=45



F-15 TPN\_3289: q=30 alpha=32 beta=0 bp=45

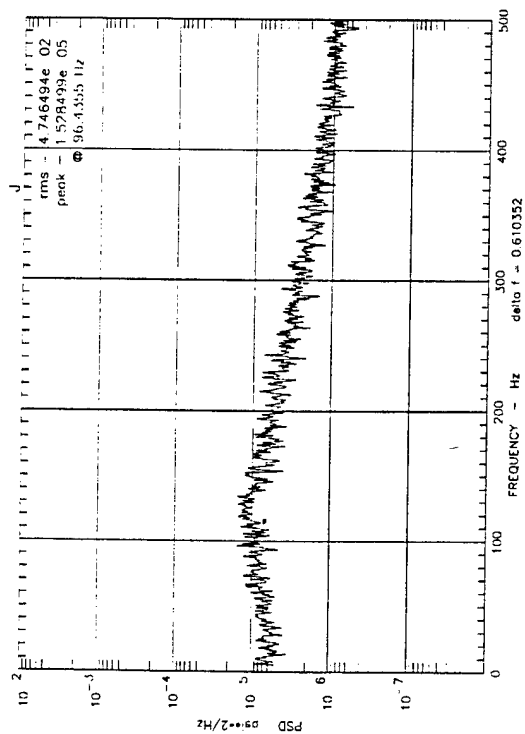


F-15 TPN\_3289: q=30 alpha=32 beta=0 bp=45

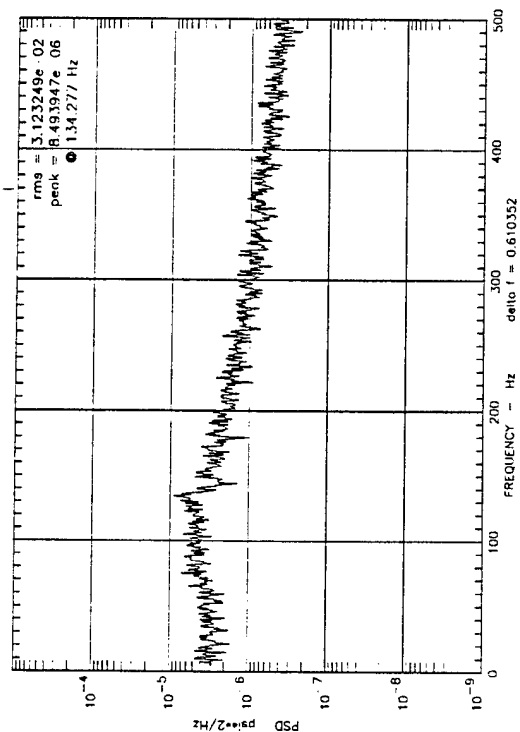




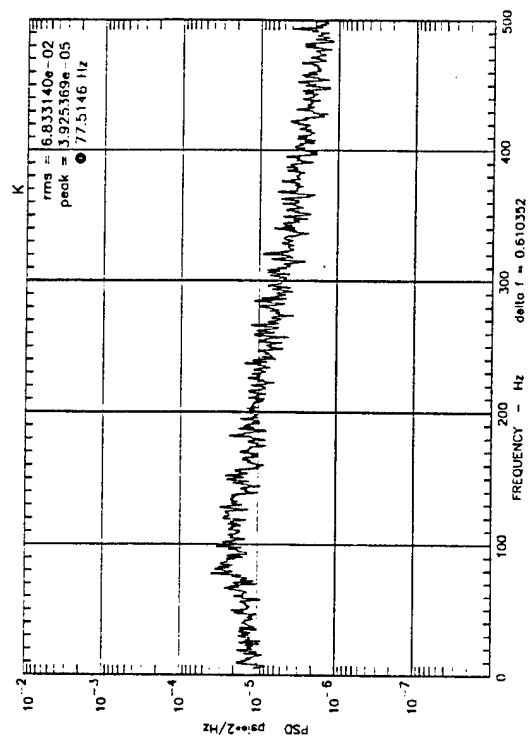
F-15 TPN\_3289: q=30 alpha=32 beta=0 bp=45



F-15 TPN\_3289: q=30 alpha=32 beta=0 bp=45



F-15 TPN\_3289: q=30 alpha=32 beta=0 bp=45



**PRESSURE PSD's**

**Q= 30 PSF**

**2.2.2 RMS SUMMARY TABS AND GRAPHS**

**F-15 Vertical Tail Buffet Test: Overall RMS of pressure data (psi, 5-500 Hz), Q=30 psf**

0 psi blowing pressure:

Beta = 4:

Alpha:	Flexible					Rigid					
	A	B	C	D	E	F	G	H	I	J	K
8	.00130	.00100	.00091	.00114	.00073	.00121	.00426	.00457	.00480	.00488	.00613
20	.00856	.00949	.00838	.00313	.00482	.01565	.03387	.04112	.04316	.03536	.08714
24	.02413	.02760	.02257	.00910	.01548	.05113	.04581	.05513	.04691	.05245	.12050
32	.05786	.05126	.05493	.02880	.05730	.09454	.04641	.03705	.03309	.04258	.05624

Beta = 0:

Alpha:	Flexible					Rigid					
	A	B	C	D	E	F	G	H	I	J	K
8	.00138	.00090	.00087	.00103	.00068	.00151	.00345	.00842	.00676	.00513	.02500
20	.01858	.02040	.01707	.00691	.01053	.02664	.02112	.02011	.02621	.01783	.06289
24	.03682	.03892	.03557	.01565	.02817	.07528	.04347	.03814	.03797	.02948	.11700
32	.05456	.04110	.04634	.02682	.05128	.06666	.05062	.04564	.03260	.05179	.08329

45 psi blowing pressure:

Beta = 4:

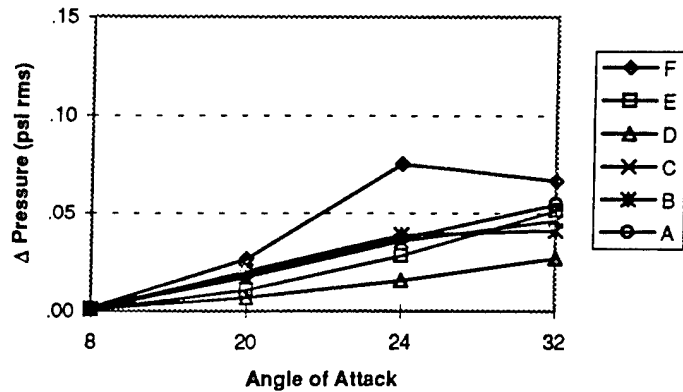
Alpha:	Flexible					Rigid					
	A	B	C	D	E	F	G	H	I	J	K
8	.00151	.00100	.00088	.00113	.00070	.00133	.00410	.00446	.00511	.00449	.00574
20	.00781	.00846	.00760	.00316	.00471	.01623	.02997	.03873	.04452	.03303	.07974
24	.01656	.01910	.01491	.00676	.01145	.03674	.04412	.05367	.04802	.05203	.12140
32	.05557	.04551	.04753	.02552	.04910	.07492	.04293	.03502	.03133	.04071	.05434

Beta = 0:

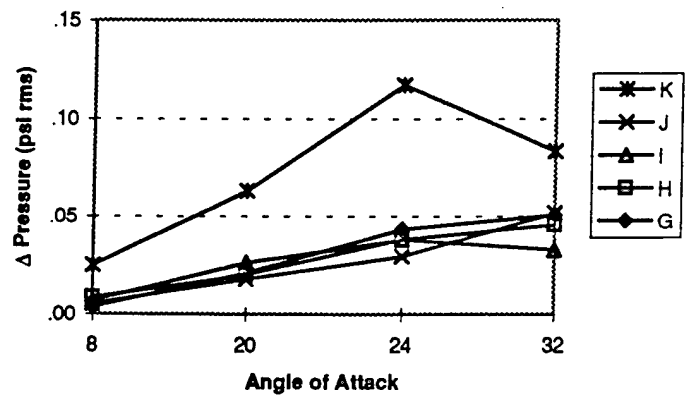
Alpha:	Flexible					Rigid					
	A	B	C	D	E	F	G	H	I	J	K
8	.00149	.00093	.00088	.00099	.00069	.00116	.00332	.00719	.00568	.00481	.01454
20	.01502	.01785	.01618	.00680	.01035	.02305	.01963	.01868	.02540	.01765	.05912
24	.02983	.03139	.02945	.01312	.02222	.05570	.04364	.03734	.03838	.02970	.11440
32	.04732	.03827	.04080	.02251	.04632	.06306	.04677	.04018	.03123	.04746	.06833

# F-15 Vertical Tail Buffet Test

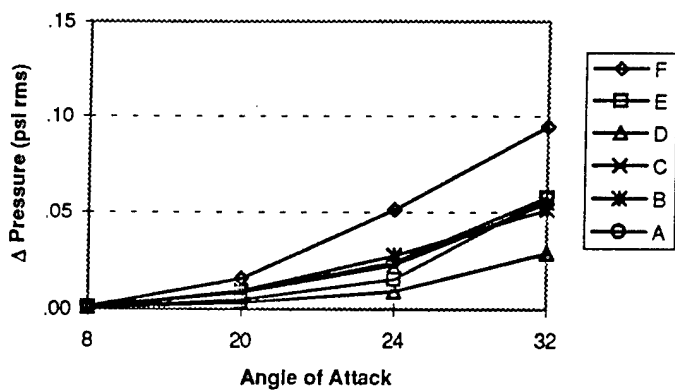
Flex Tail:  $Q=30$  psf,  $\text{Beta}=0$   
0 psi blowing @ wing L.E.



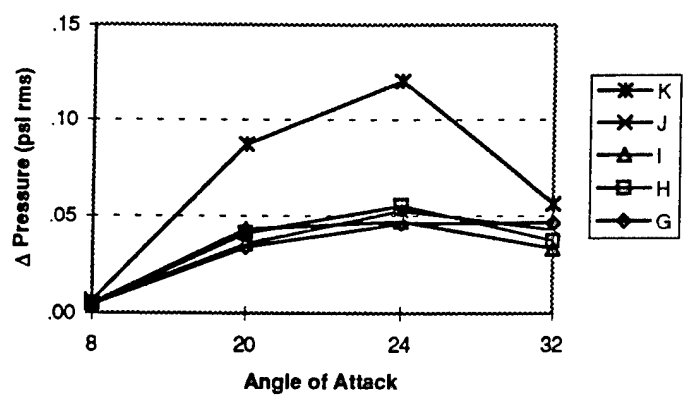
Rigid Tail:  $Q=30$  psf,  $\text{Beta}=0$   
0 psi blowing @ wing L.E.



Flex Tail:  $Q=30$  psf,  $\text{Beta}=4$   
0 psi blowing @ wing L.E.

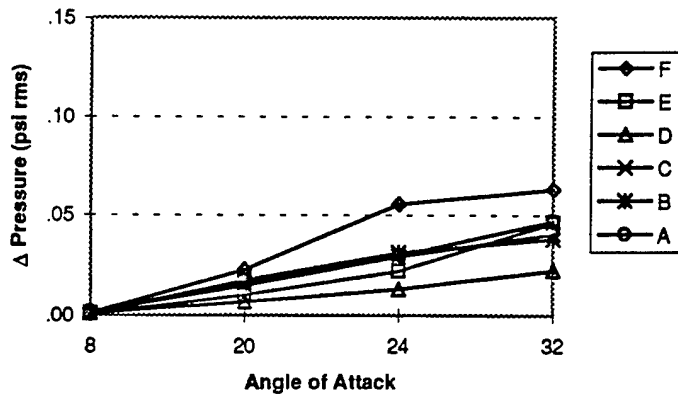


Rigid Tail:  $Q=30$  psf,  $\text{Beta}=4$   
0 psi blowing @ wing L.E.

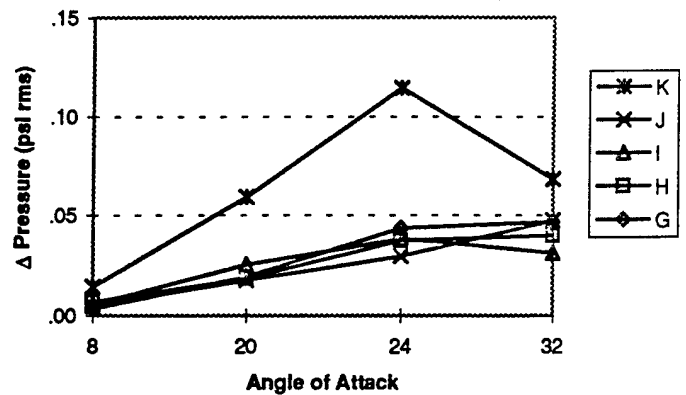


# F-15 Vertical Tail Buffet Test

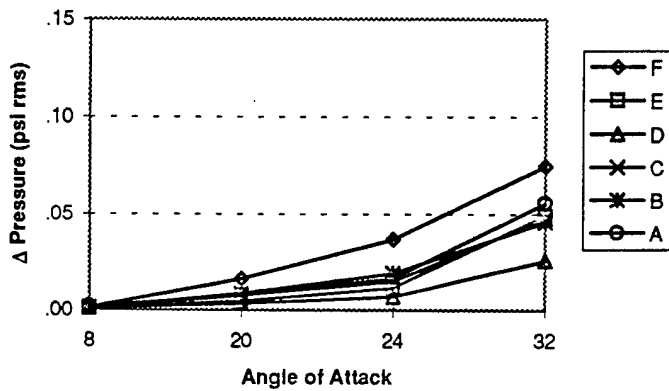
Flex Tail:  $Q=30$  psf,  $\text{Beta}=0$   
45 psi blowing @ wing L.E.



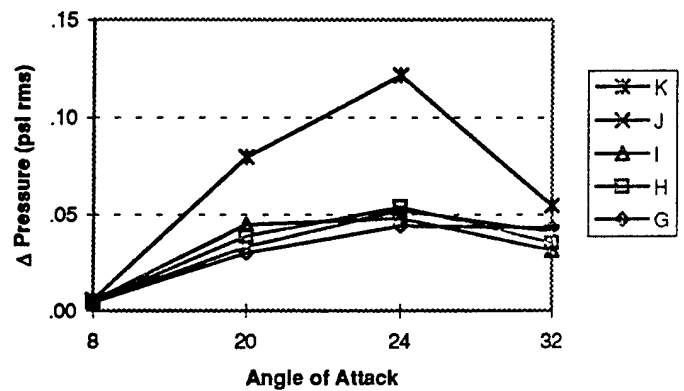
Rigid Tail:  $Q=30$  psf,  $\text{Beta}=0$   
45 psi blowing @ wing L.E.



Flex Tail:  $Q=30$  psf,  $\text{Beta}=4$   
45 psi blowing @ wing L.E.



Rigid Tail:  $Q=30$  psf,  $\text{Beta}=4$   
45 psi blowing @ wing L.E.



**2.3 CSD GRAPHS, Q= 56 PSF**

**2.3.1 CSD MAGNITUDE GRAPHS**

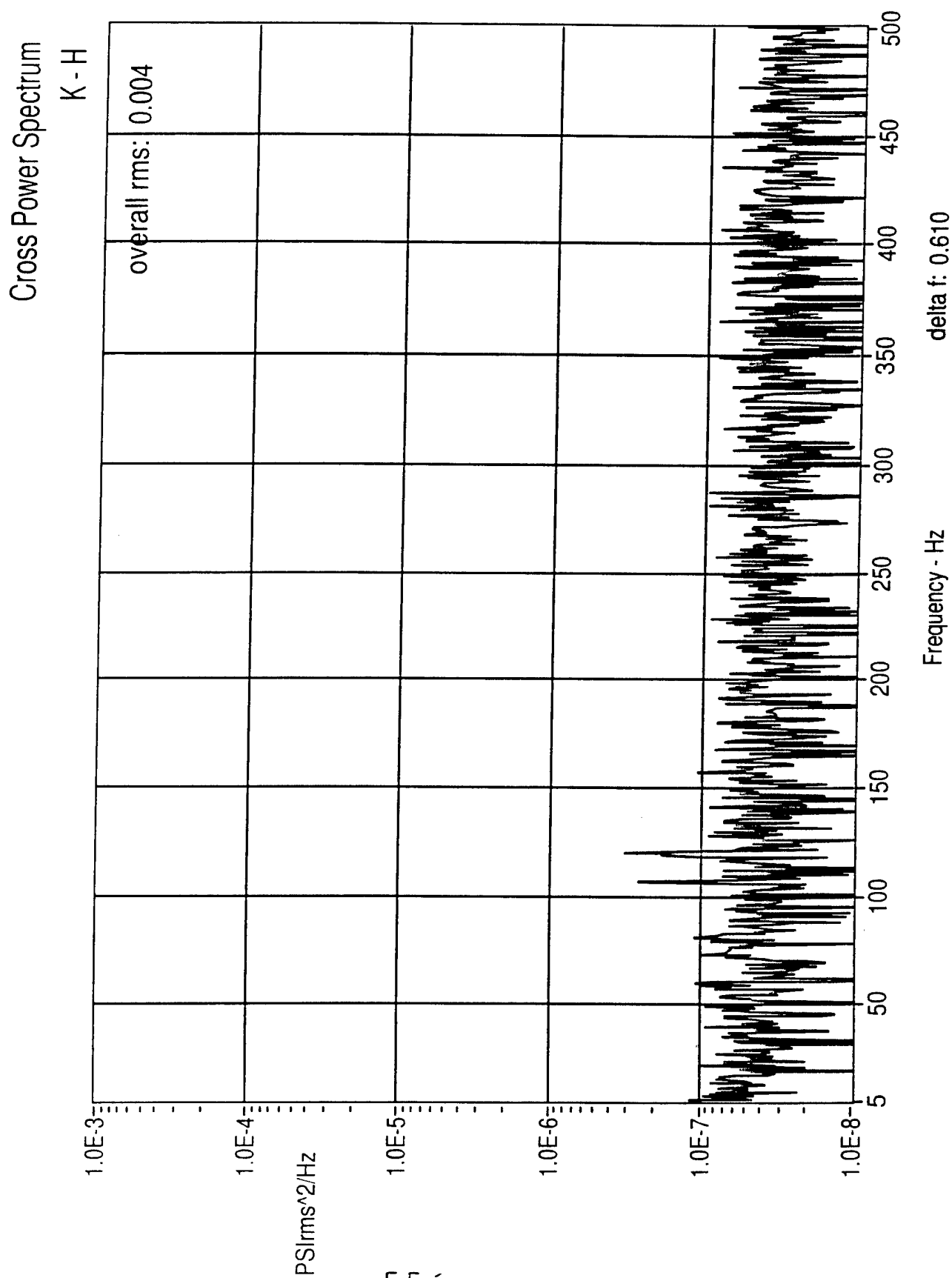
**2.3.2 RMS SUMMARY TABS OF MAGNITUDES**

**2.3.3 PHASE PLOTS**

**CSD GRAPHS**  
**Q= 56 PSF**

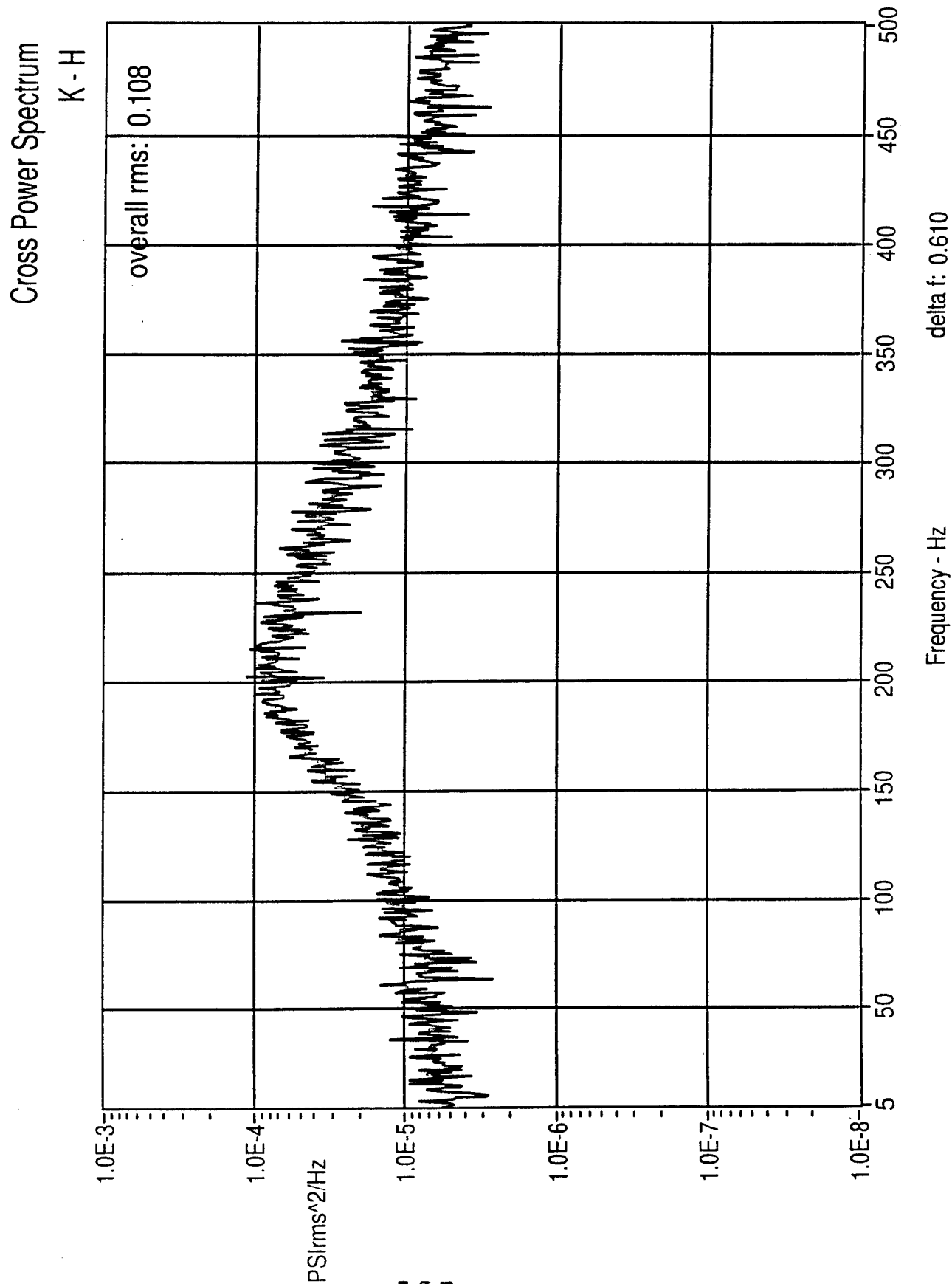
**2.3.1 CSD MAGNITUDE GRAPHS**

F-15 TPN\_2918: alpha=8 beta=4 bp=0

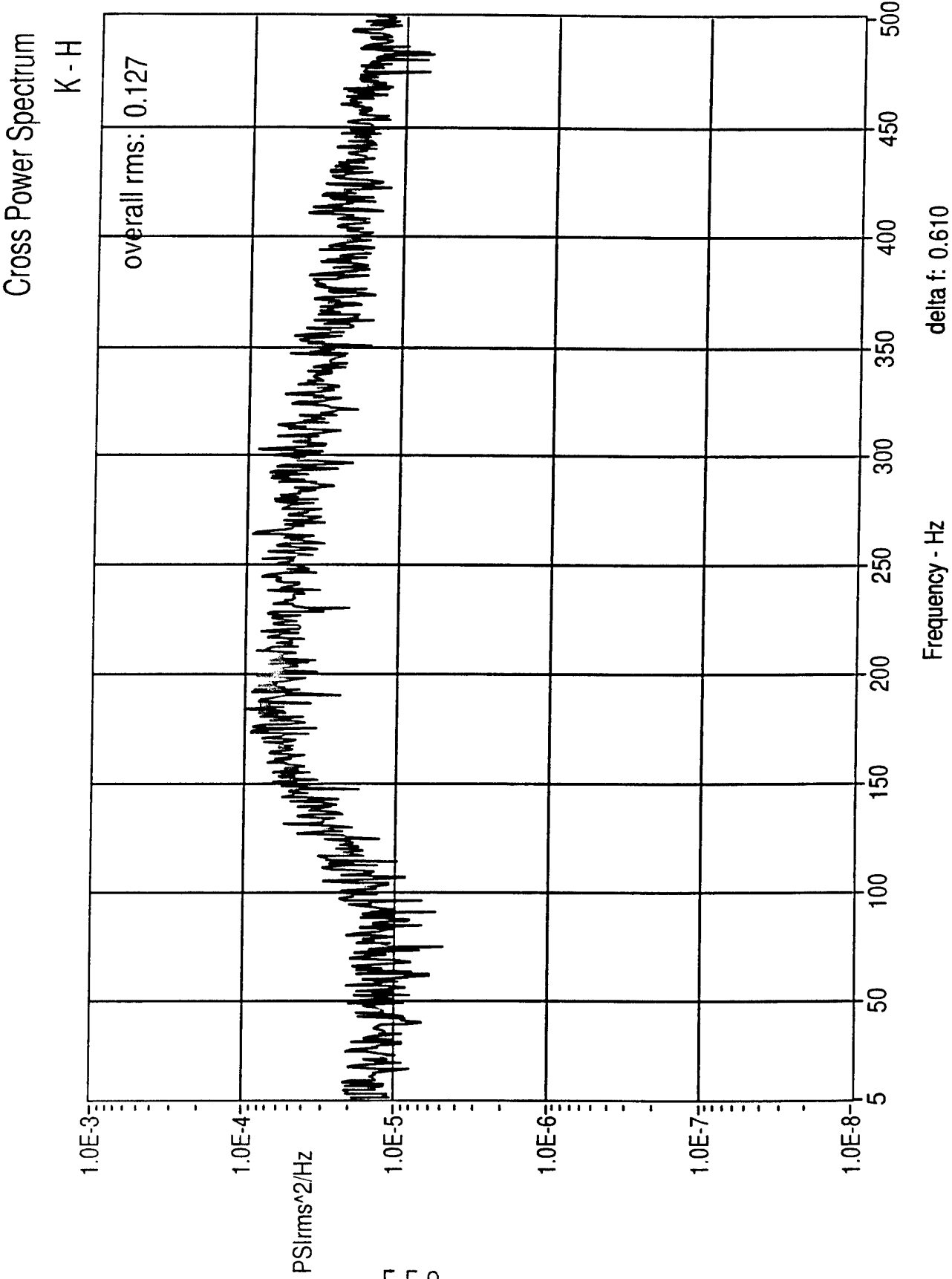




F-15 TPN\_2924: alpha=20 beta=4 bp=0



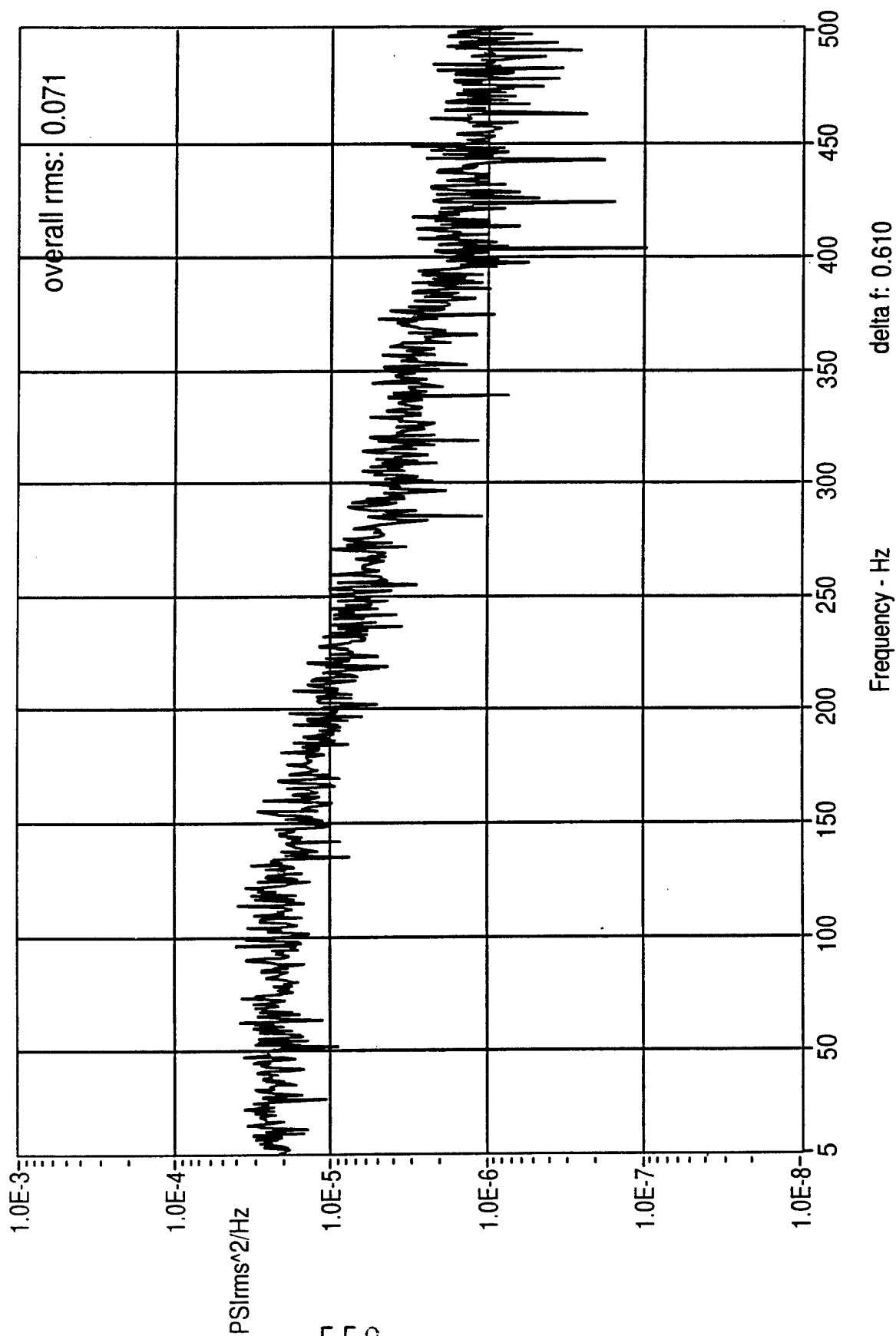
F-15 TPN\_2926: alpha=24 beta=4 bp=0



F-15 TPN\_2928: alpha=32 beta=4 bp=0

# Cross Power Spectrum

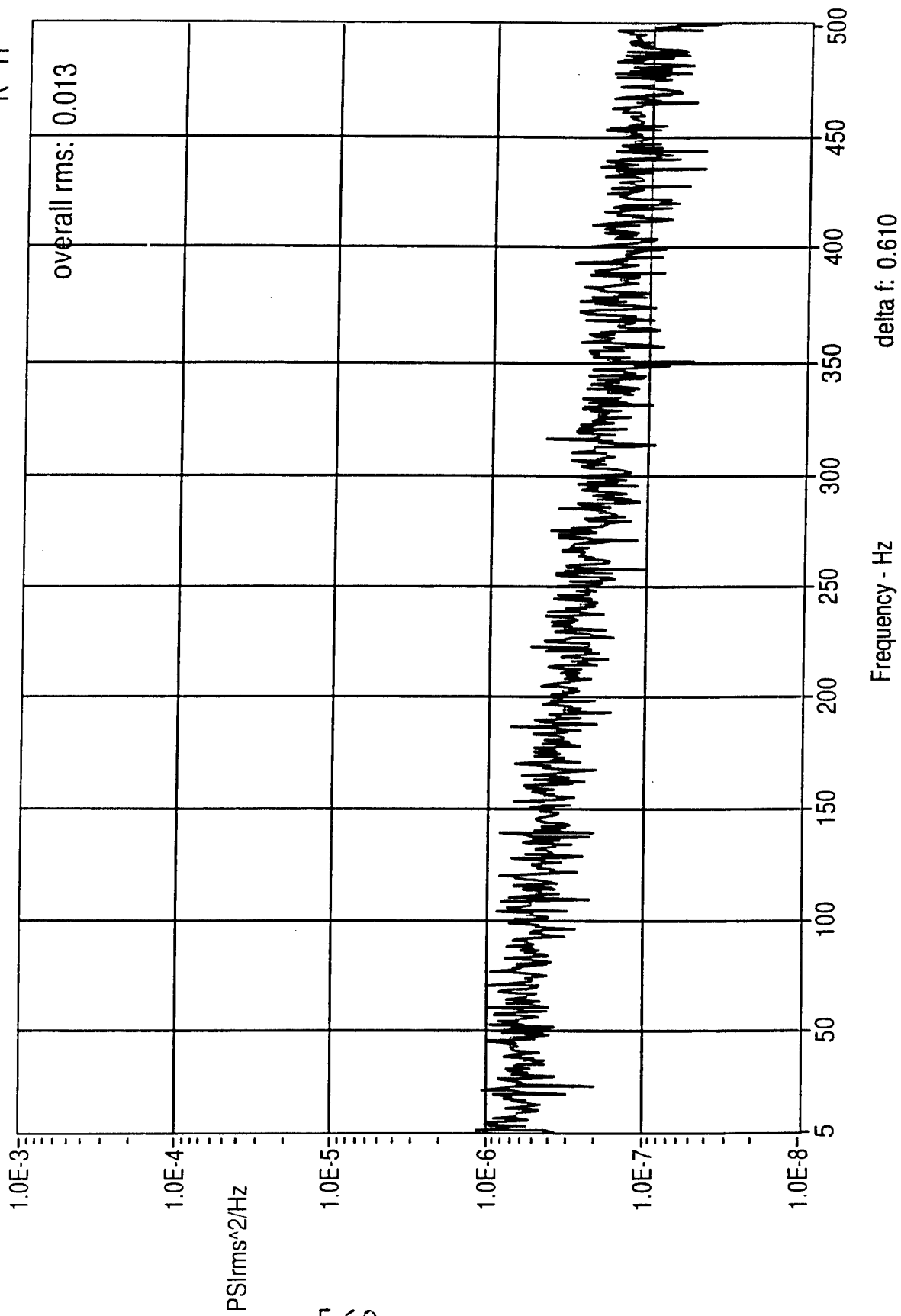
K - H



F-15 TPN\_2844: alpha=8 beta=0 bp=0

# Cross Power Spectrum

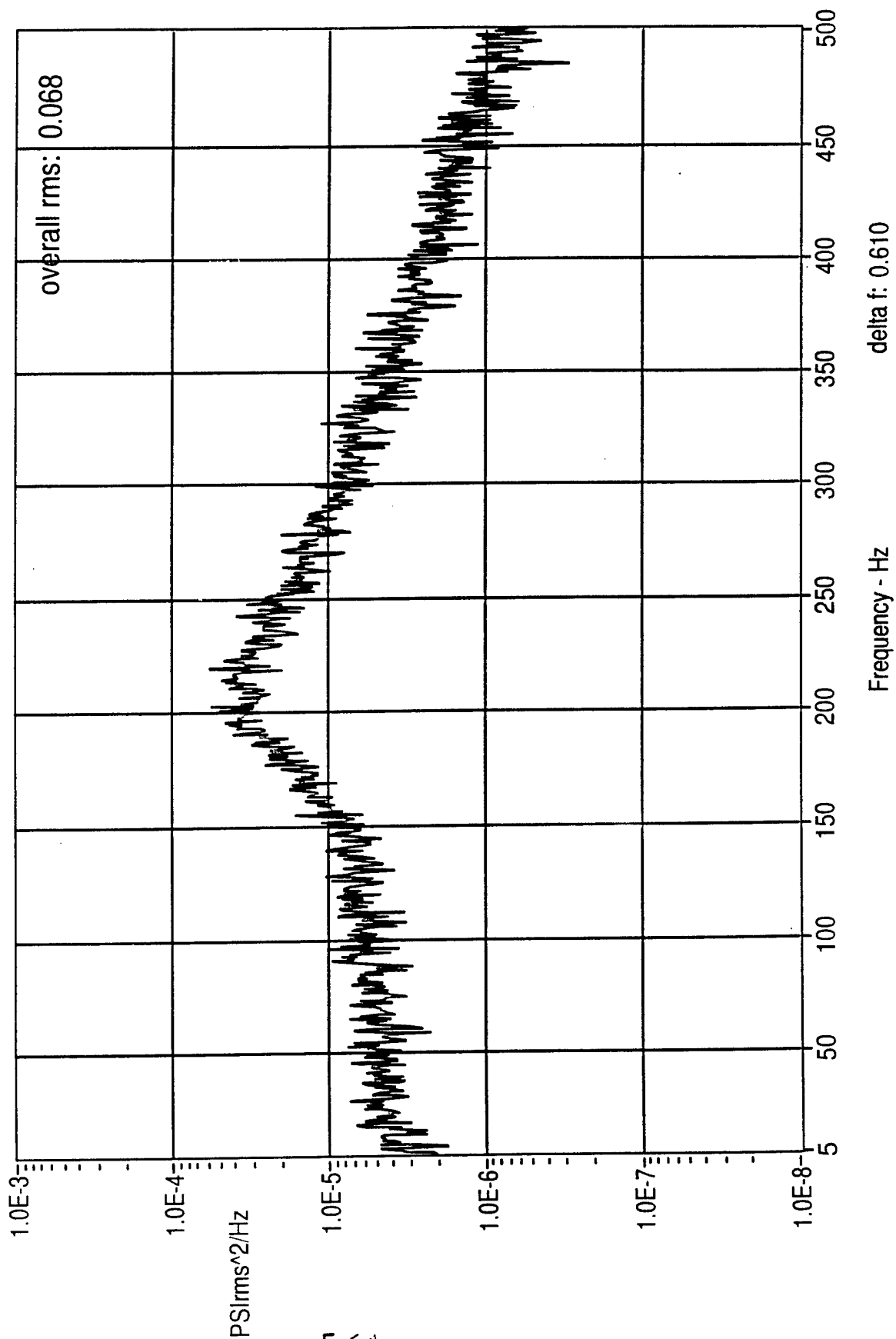
K - H



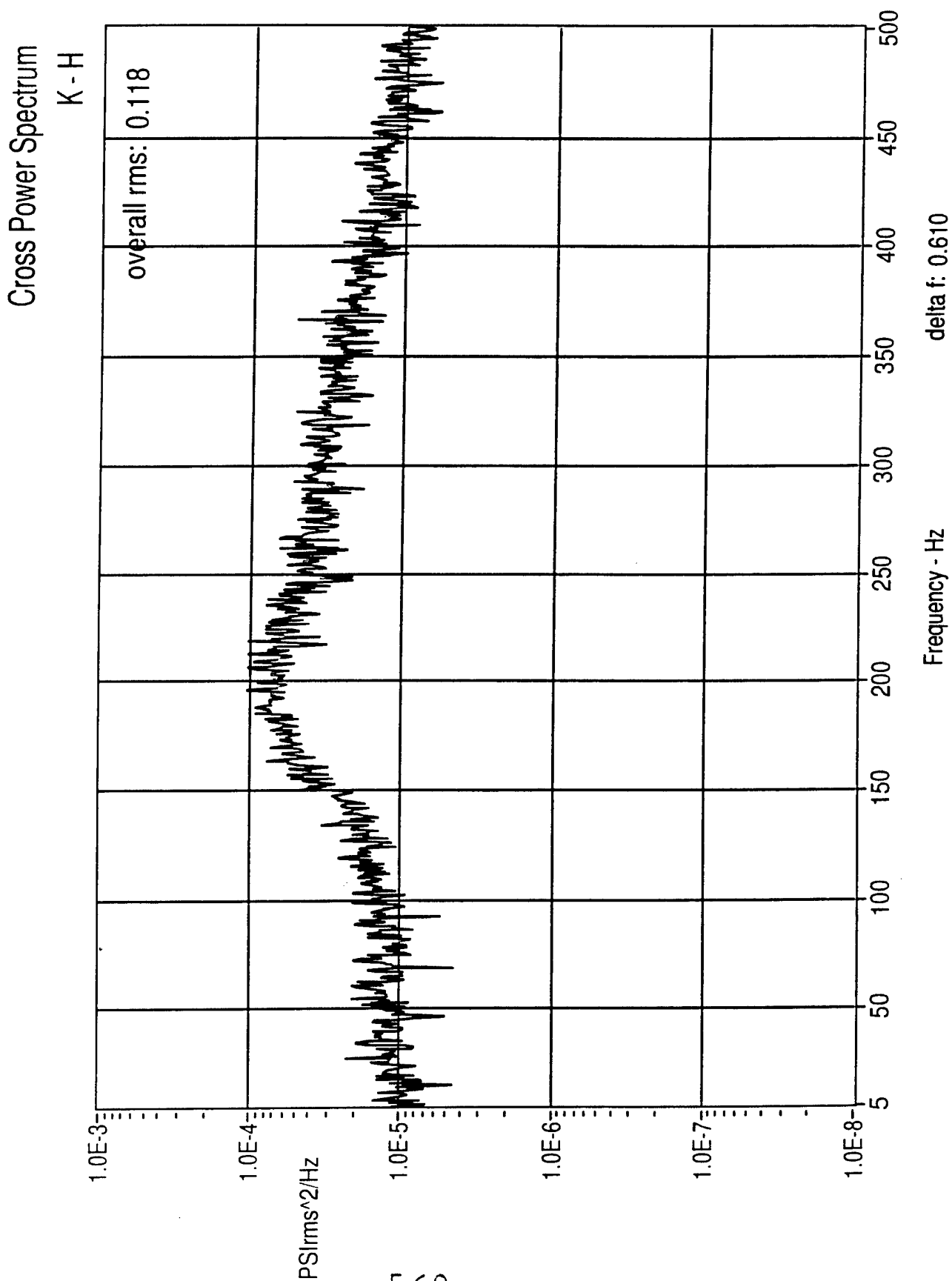
F-15 TPN\_2850: alpha=20 beta=0 bp=0

# Cross Power Spectrum

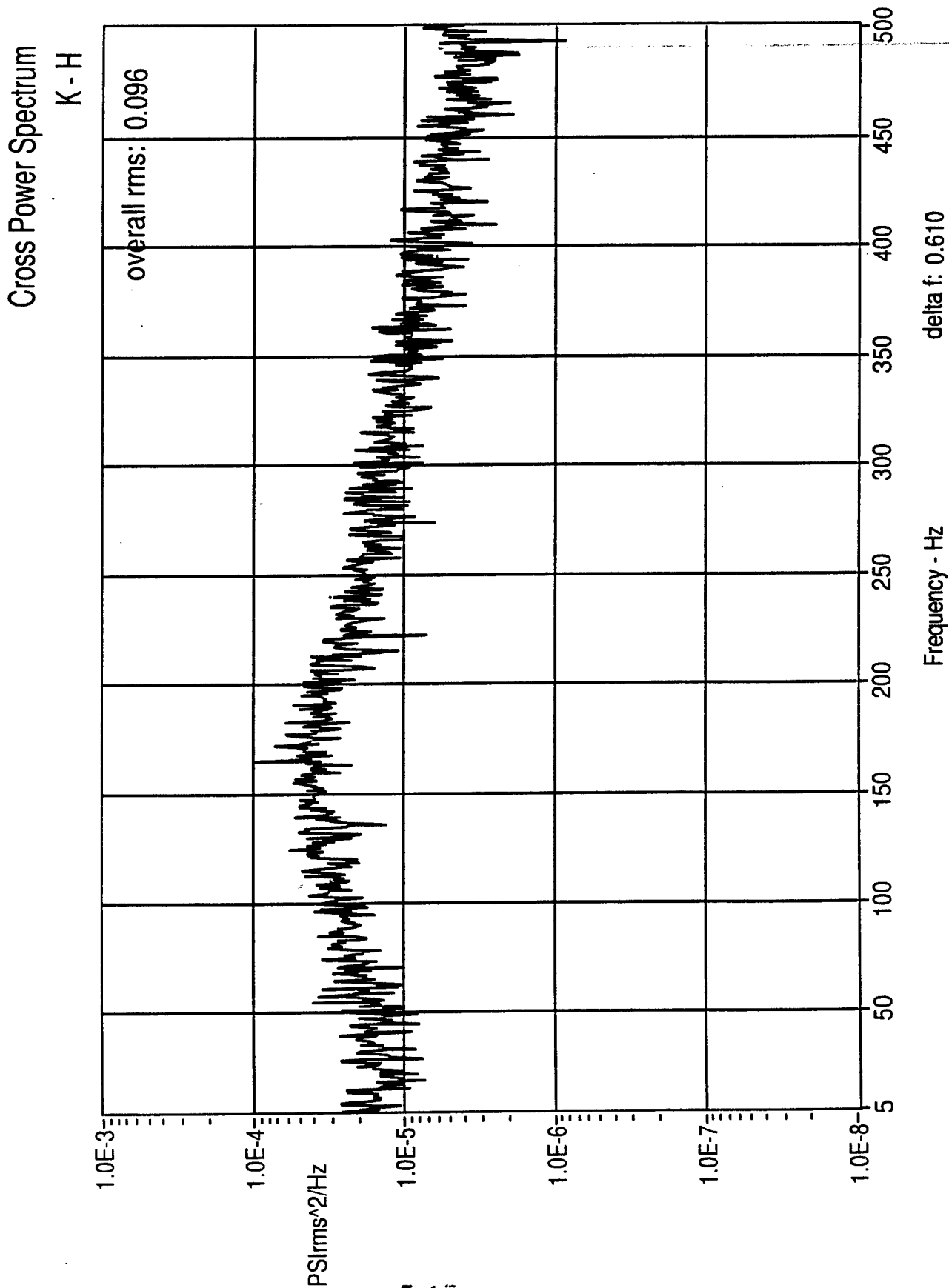
K - H



F-15 TPN\_2852: alpha=24 beta=0 bp=0



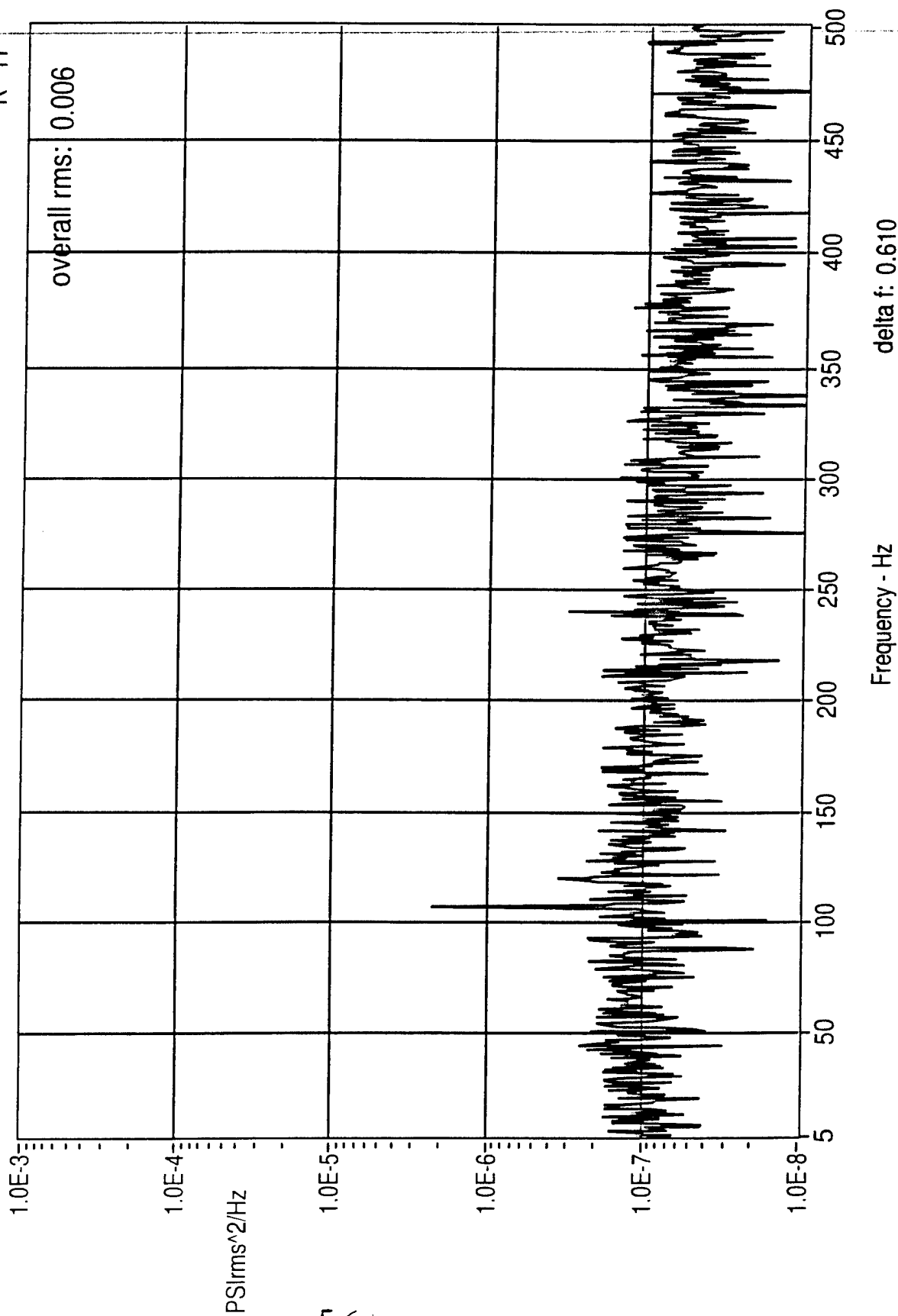
F-15 TPN\_2854: alpha=32 beta=0 bp=0



F-15 TPN\_2864: alpha=8 beta=-4 bp=0

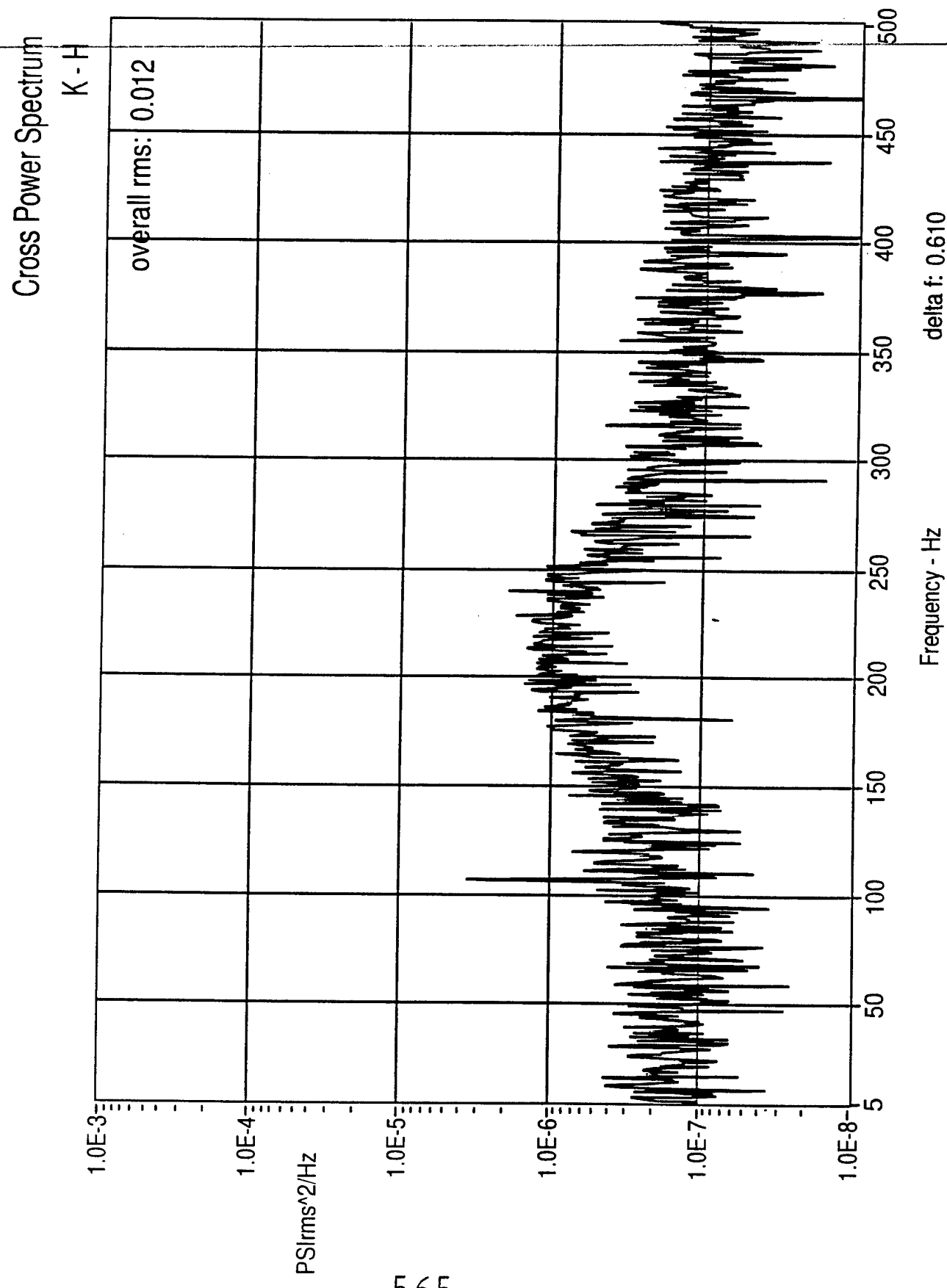
# Cross Power Spectrum

K - H

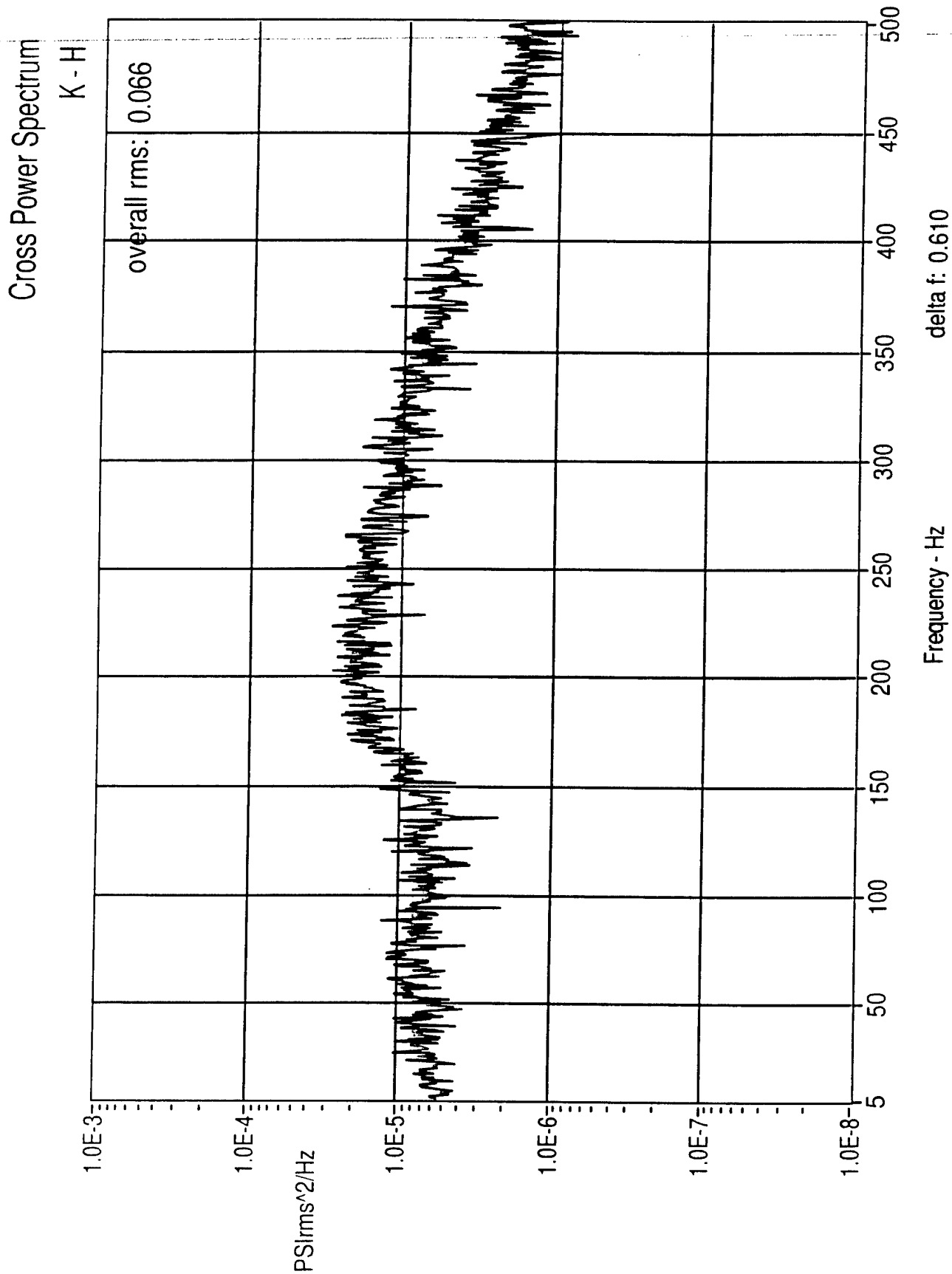




F-15 TPN\_2870: alpha=20 beta=-4 bp=0



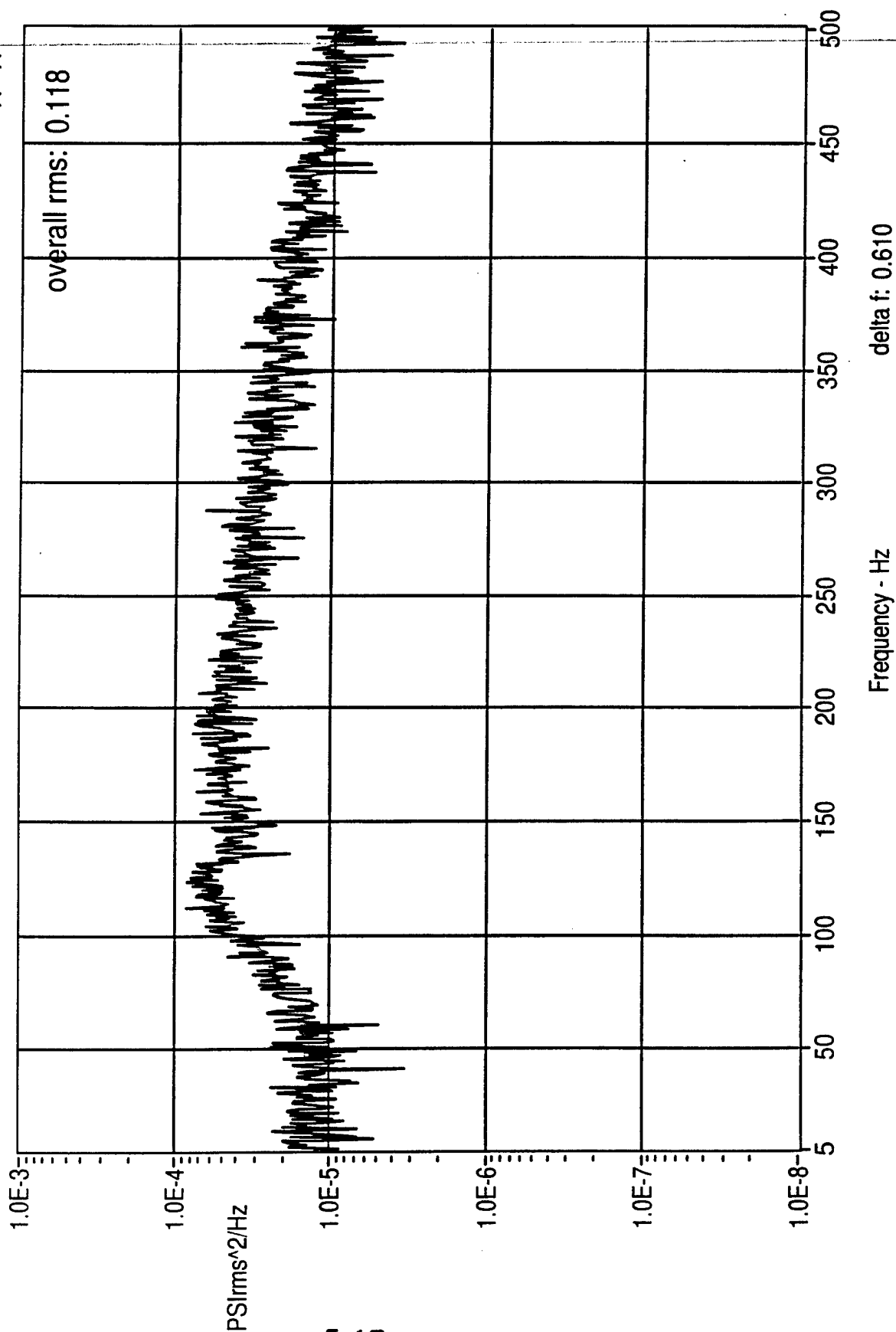
F-15 TPN\_2872: alpha=24 beta=-4 bp=0



F-15 TPN\_2874: alpha=32 beta=-4 bp=0

# Cross Power Spectrum

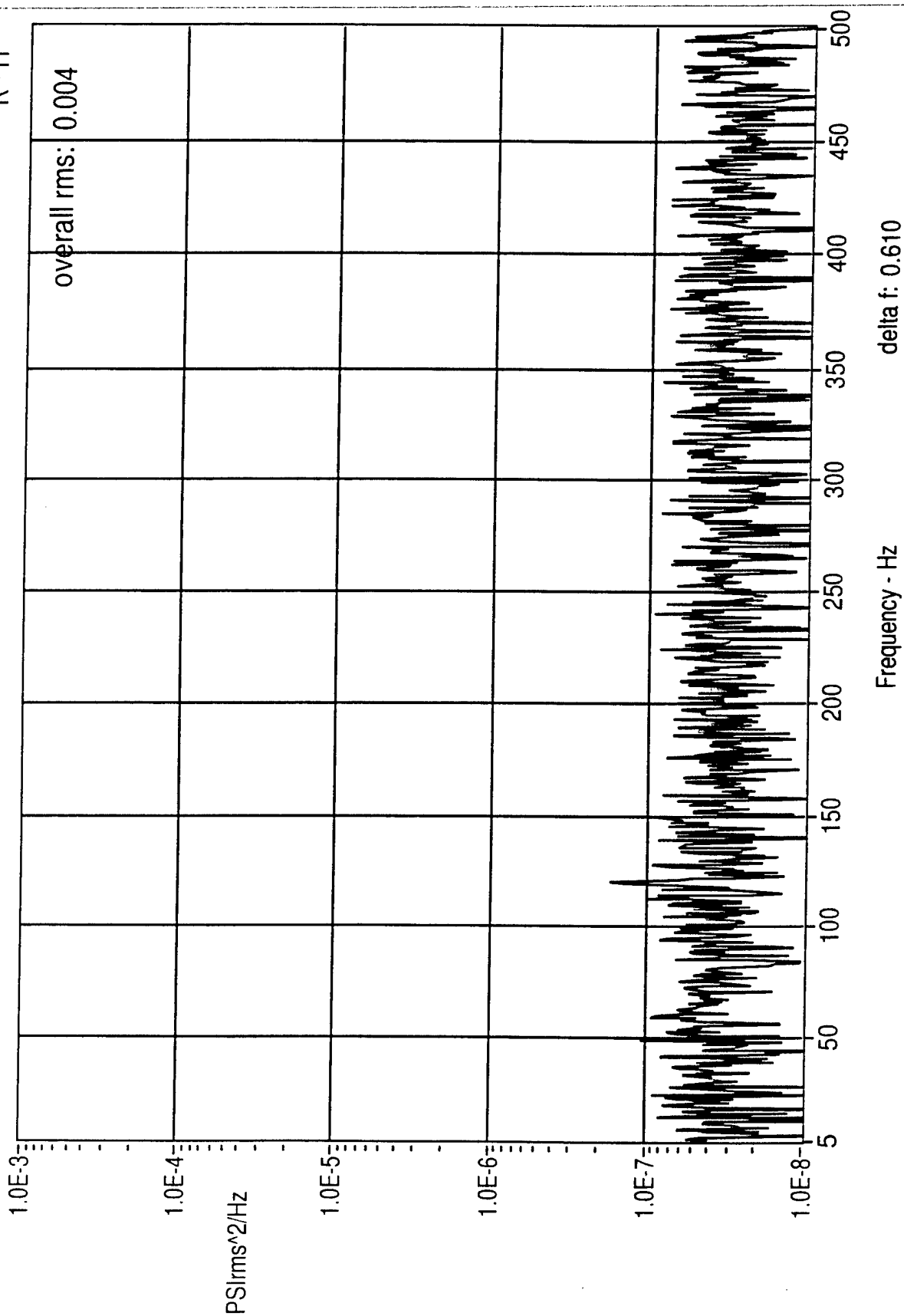
K - H



F-15 TPN\_3351: alpha=8 beta=4 bp=45

# Cross Power Spectrum

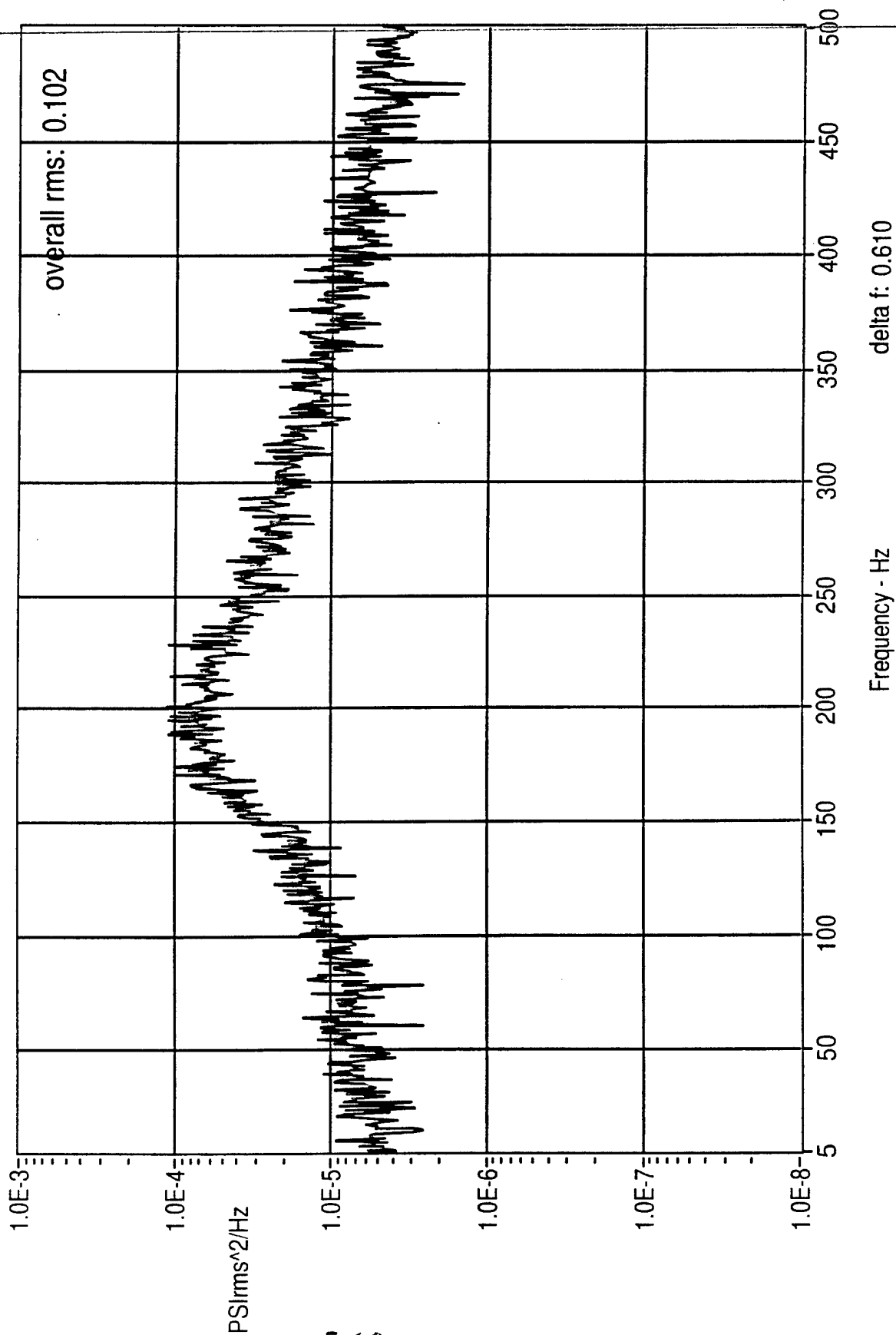
K - H



F-15 TPN\_3357: alpha=20 beta=4 bp=45

# Cross Power Spectrum

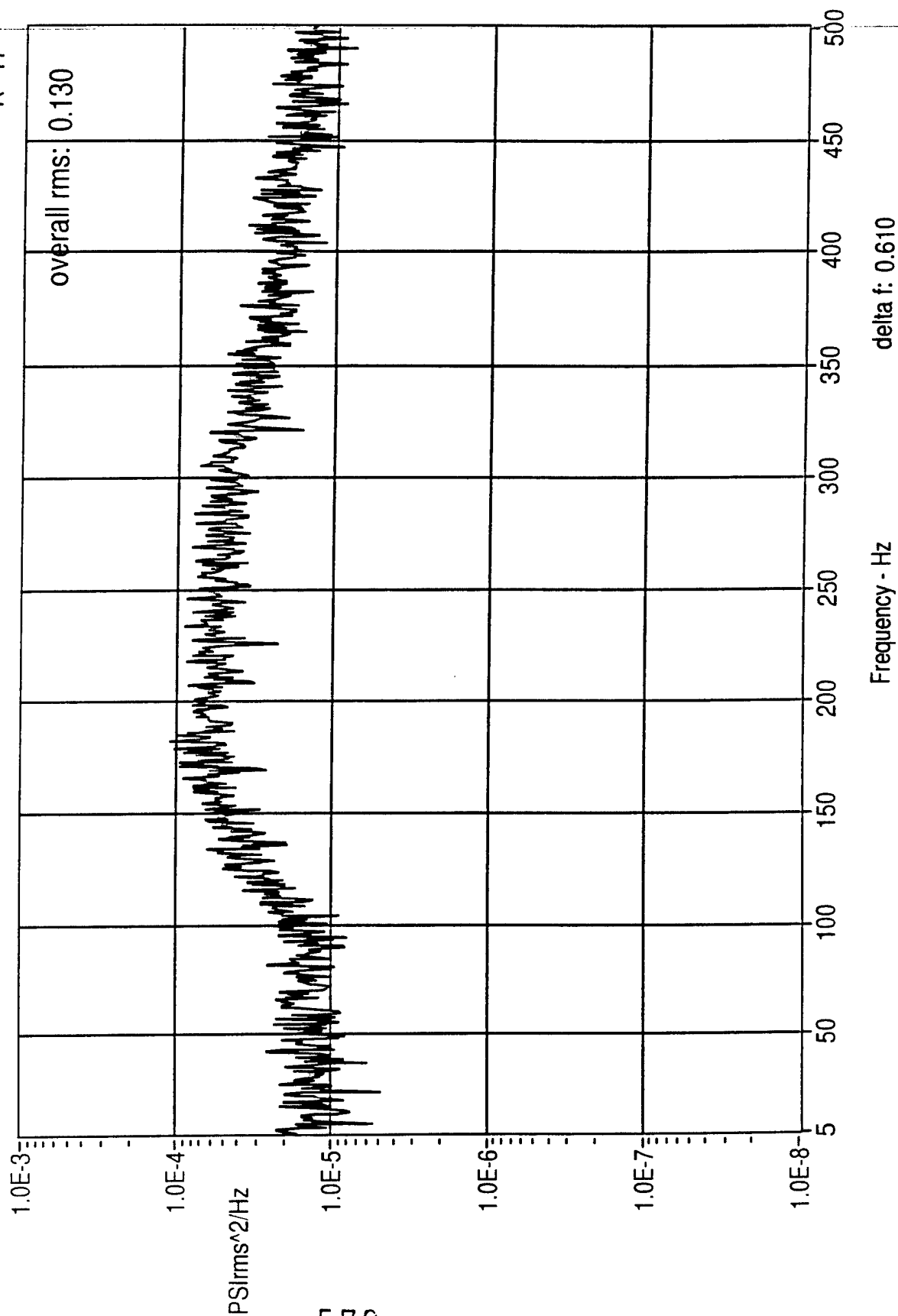
K - H



F-15 TPN\_3359: alpha=24 beta=4 bp=45

# Cross Power Spectrum

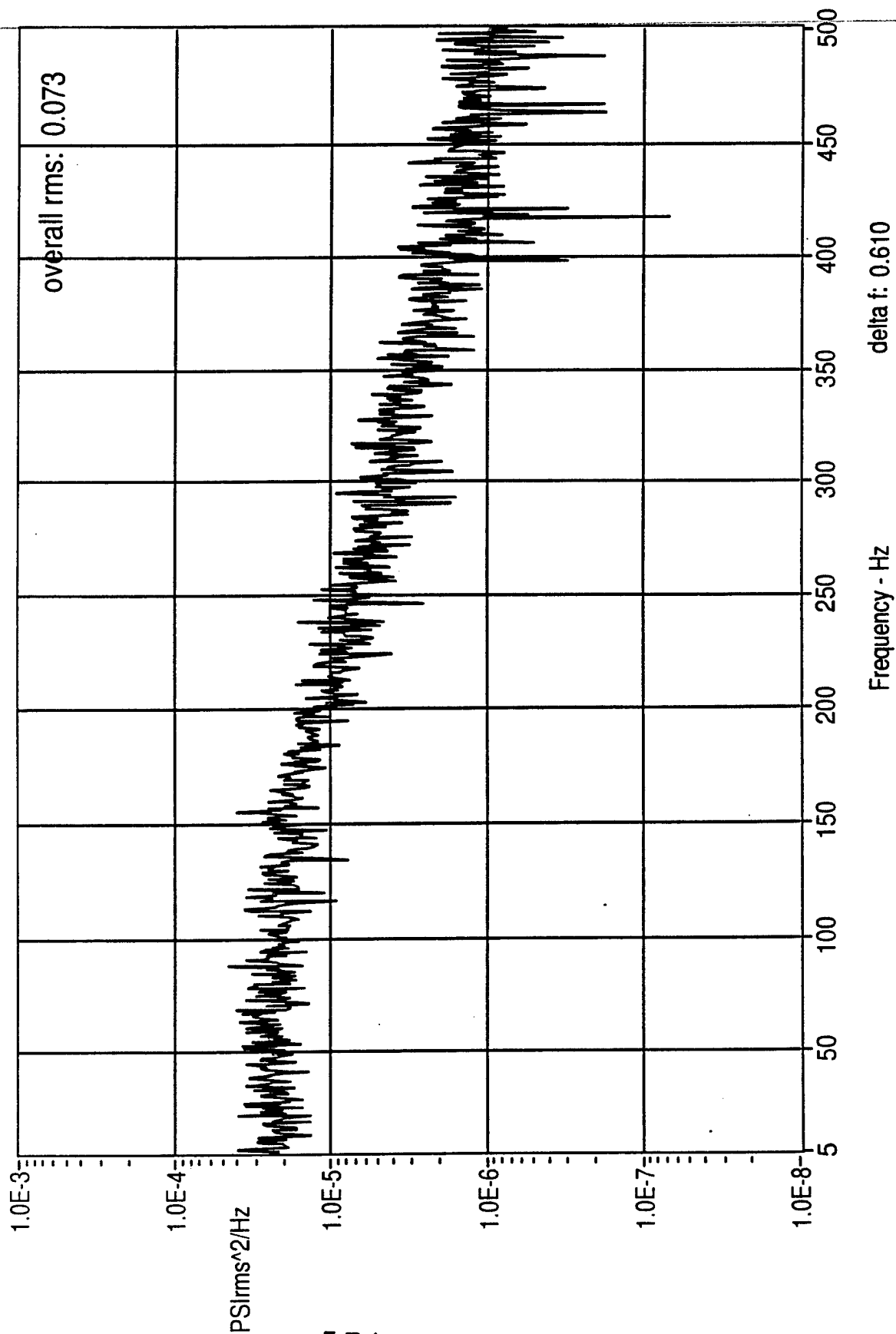
K - H



F-15 TPN\_3361: alpha=32 beta=4 bp=45

# Cross Power Spectrum

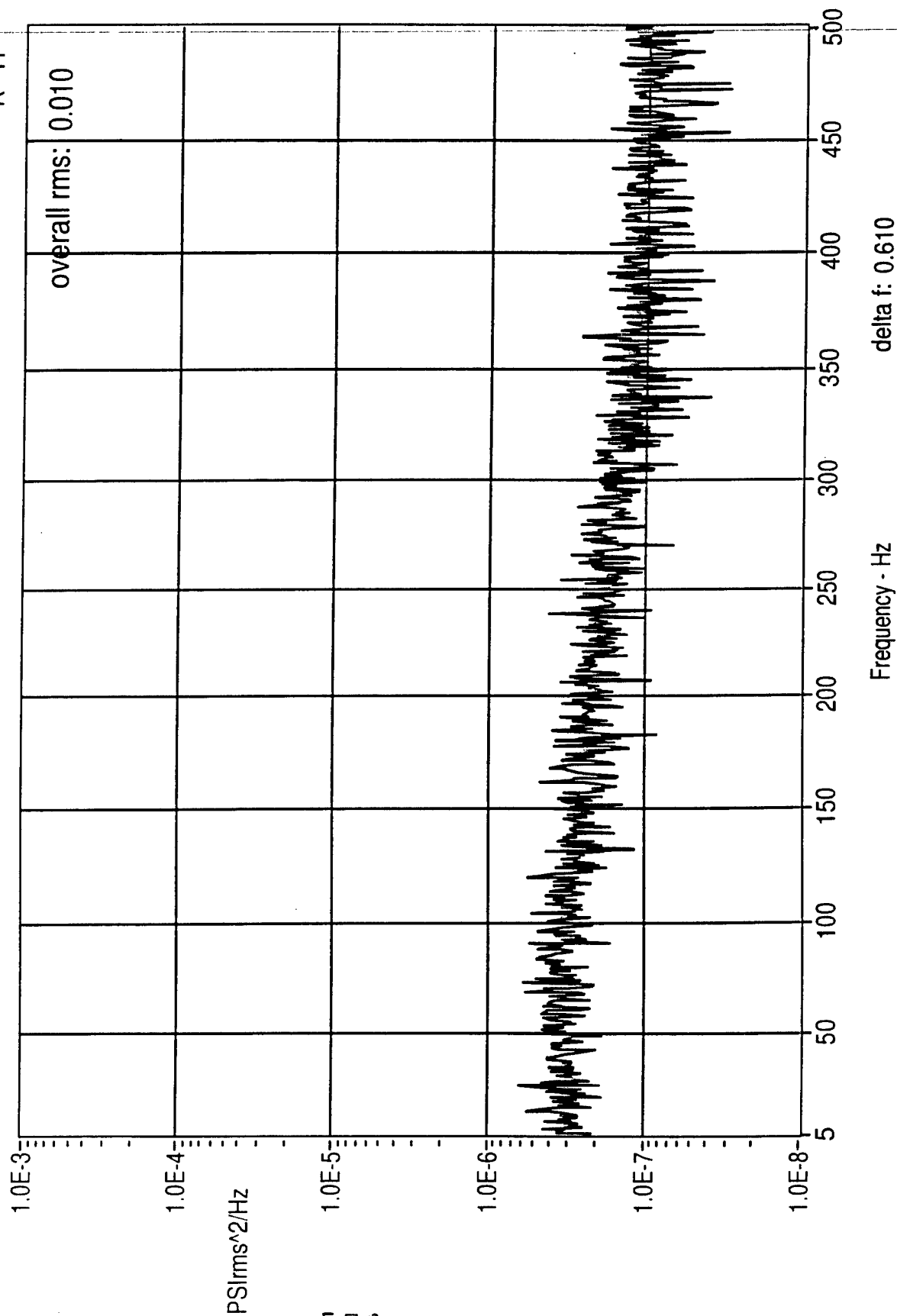
K-H



F-15 TPN\_3333: alpha=8 beta=0 bp=45

# Cross Power Spectrum

K - H

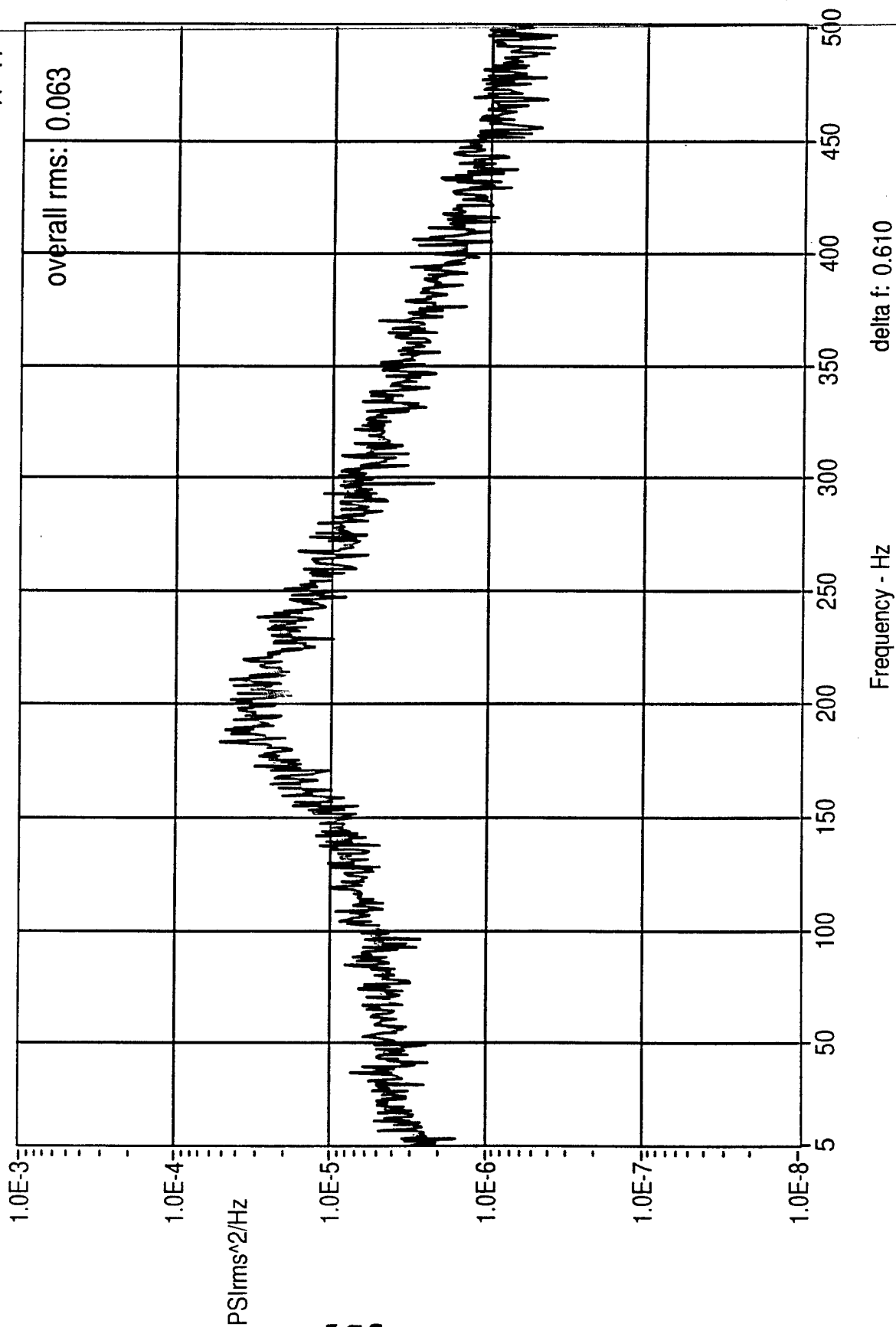




F-15 TPN\_3339: alpha=20 beta=0 bp=45

# Cross Power Spectrum

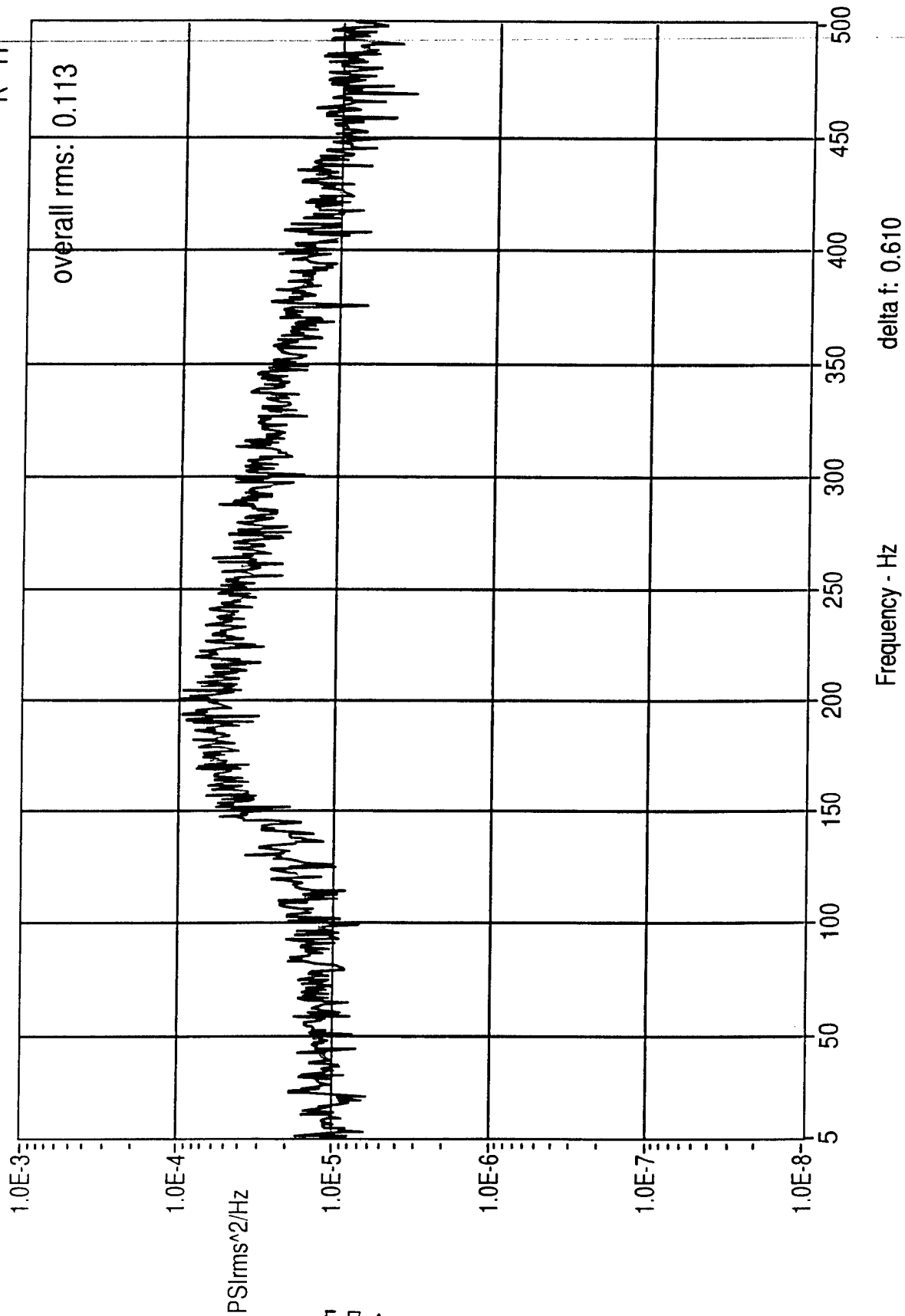
K - H



F-15 TPN\_3341: alpha=24 beta=0 bp=45

# Cross Power Spectrum

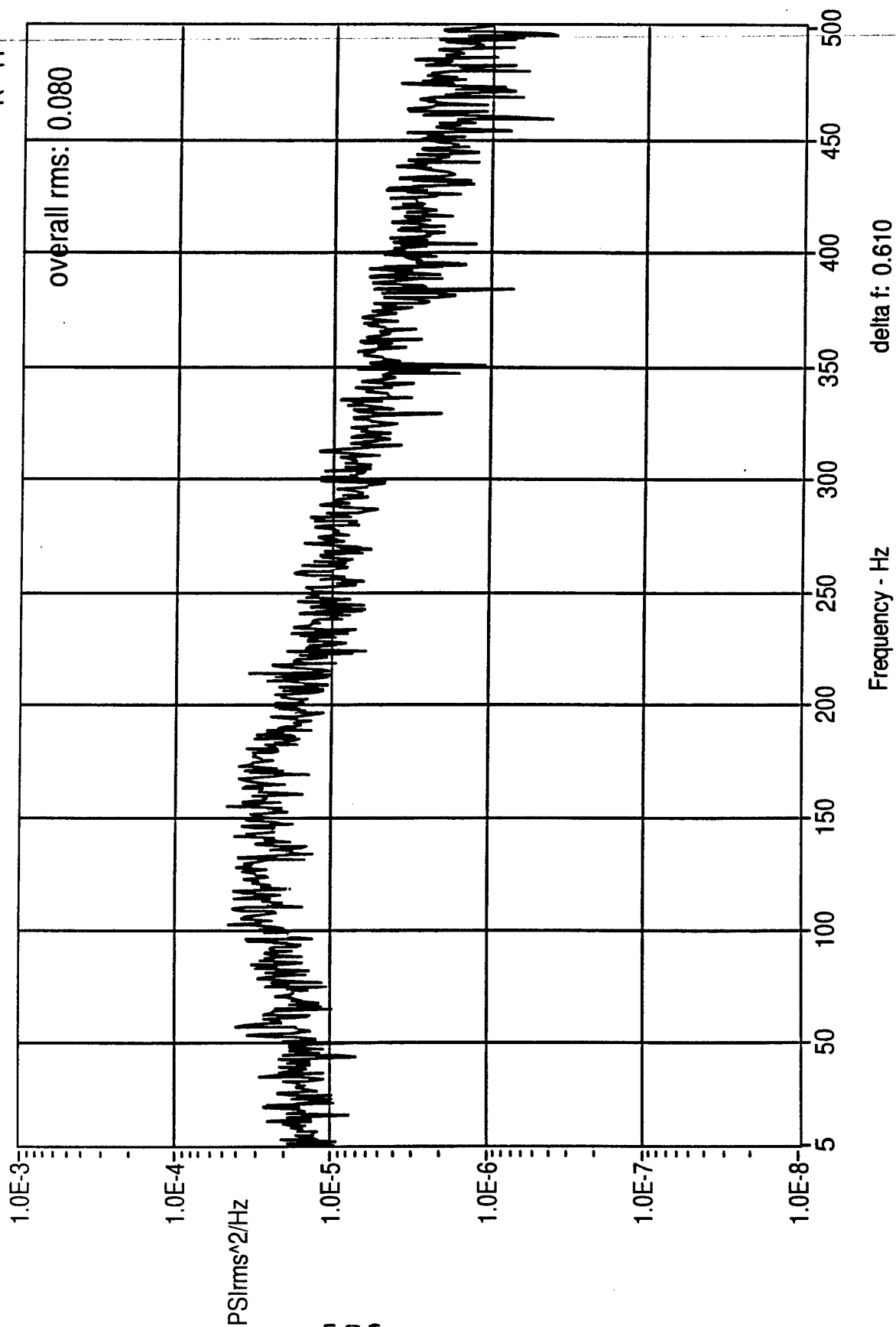
K - H



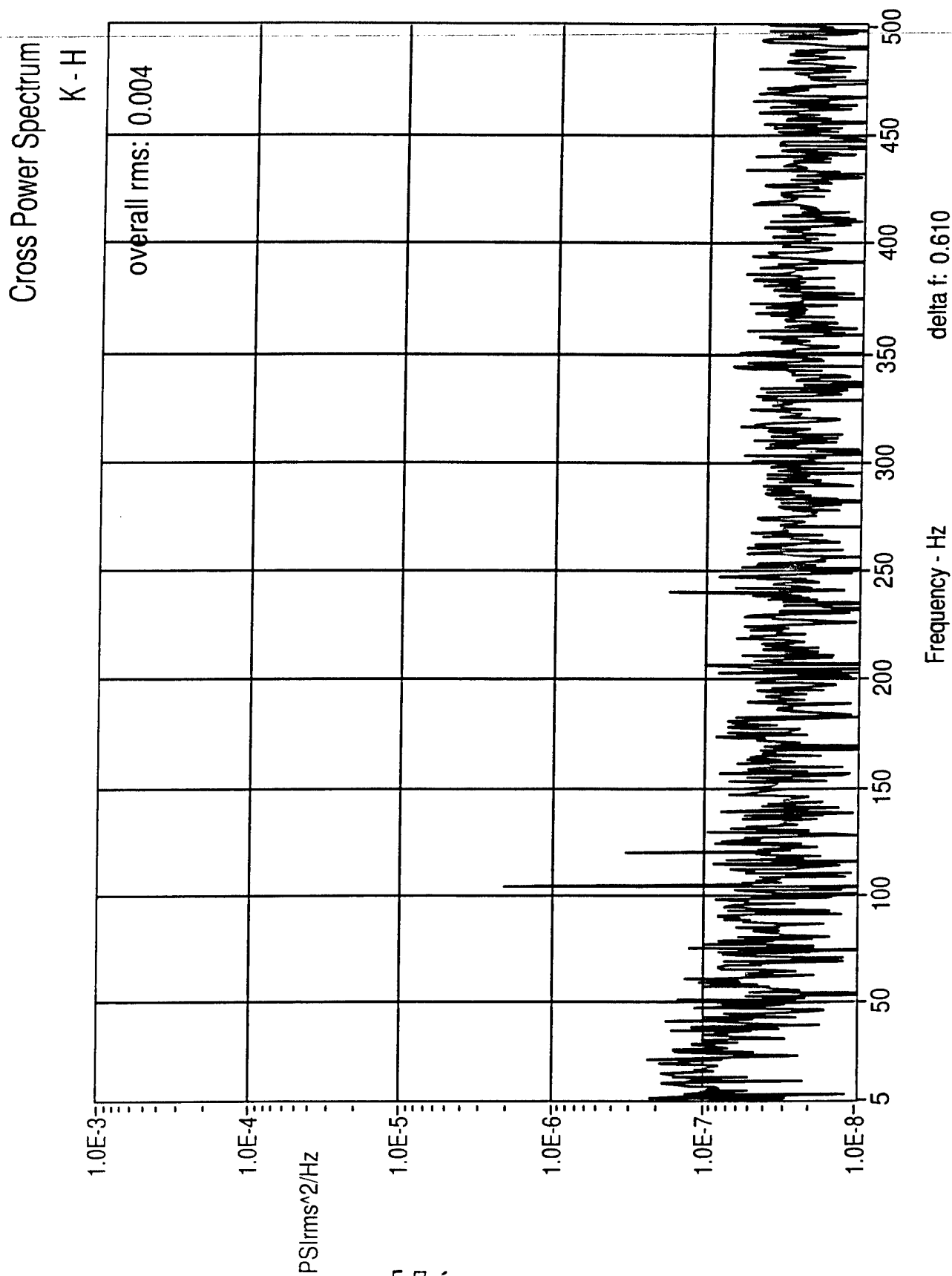
F-15 TPN\_3343: alpha=32 beta=0 bp=45

# Cross Power Spectrum

K - H



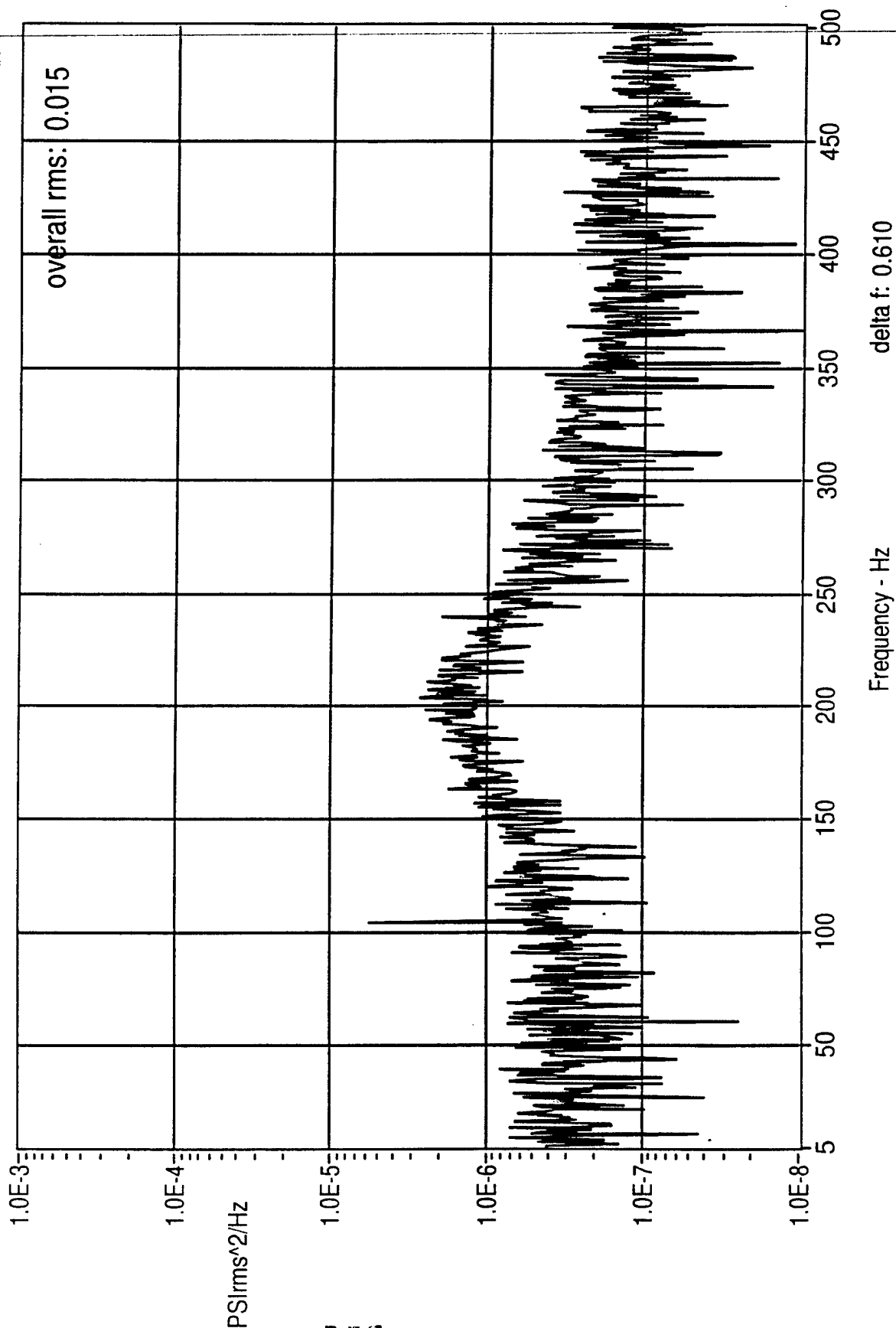
F-15 TPN\_3369: alpha=8 beta=-4 bp=45



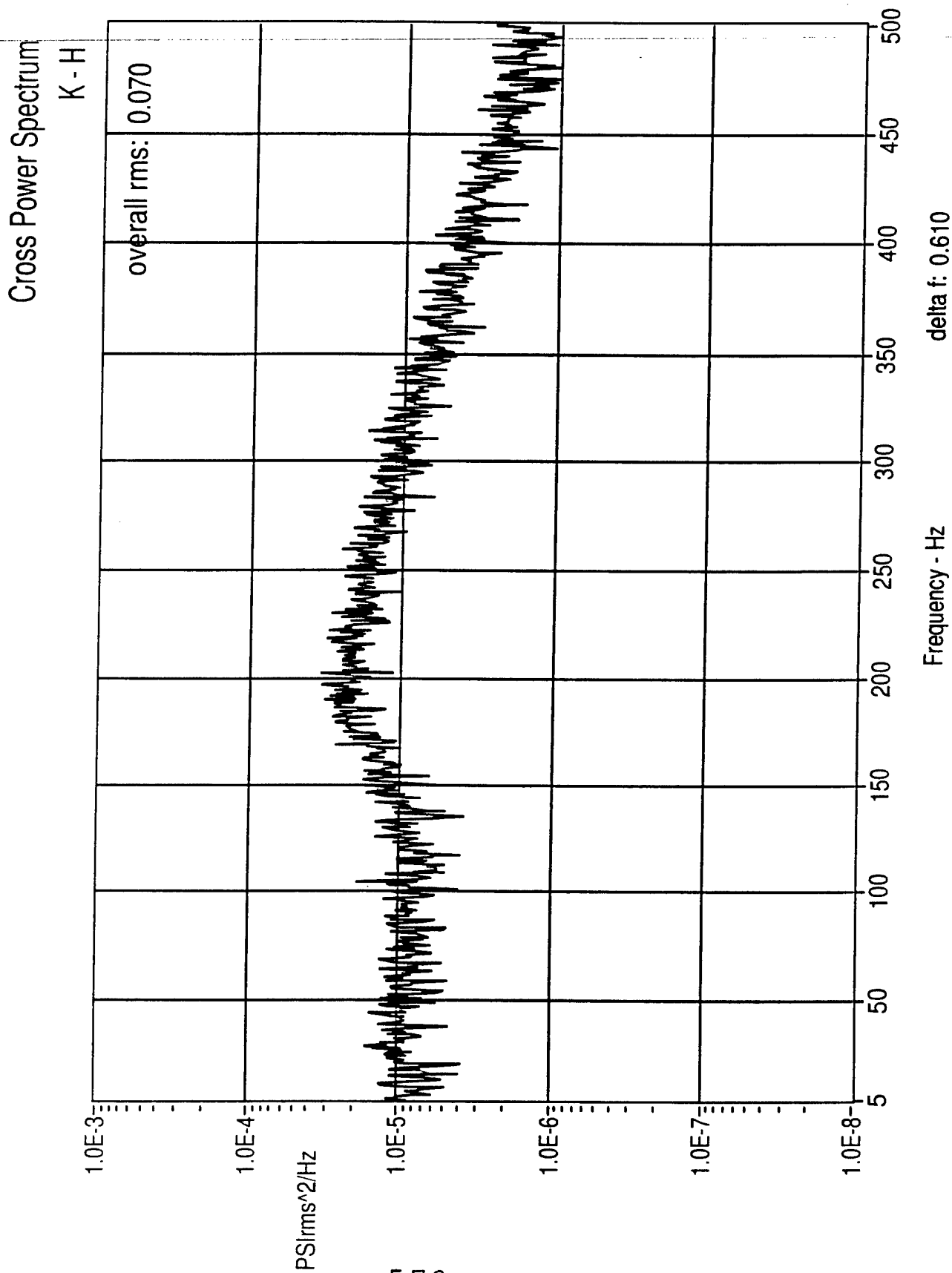
F-15 TPN\_3375: alpha=20 beta=-4 bp=45

# Cross Power Spectrum

K - H



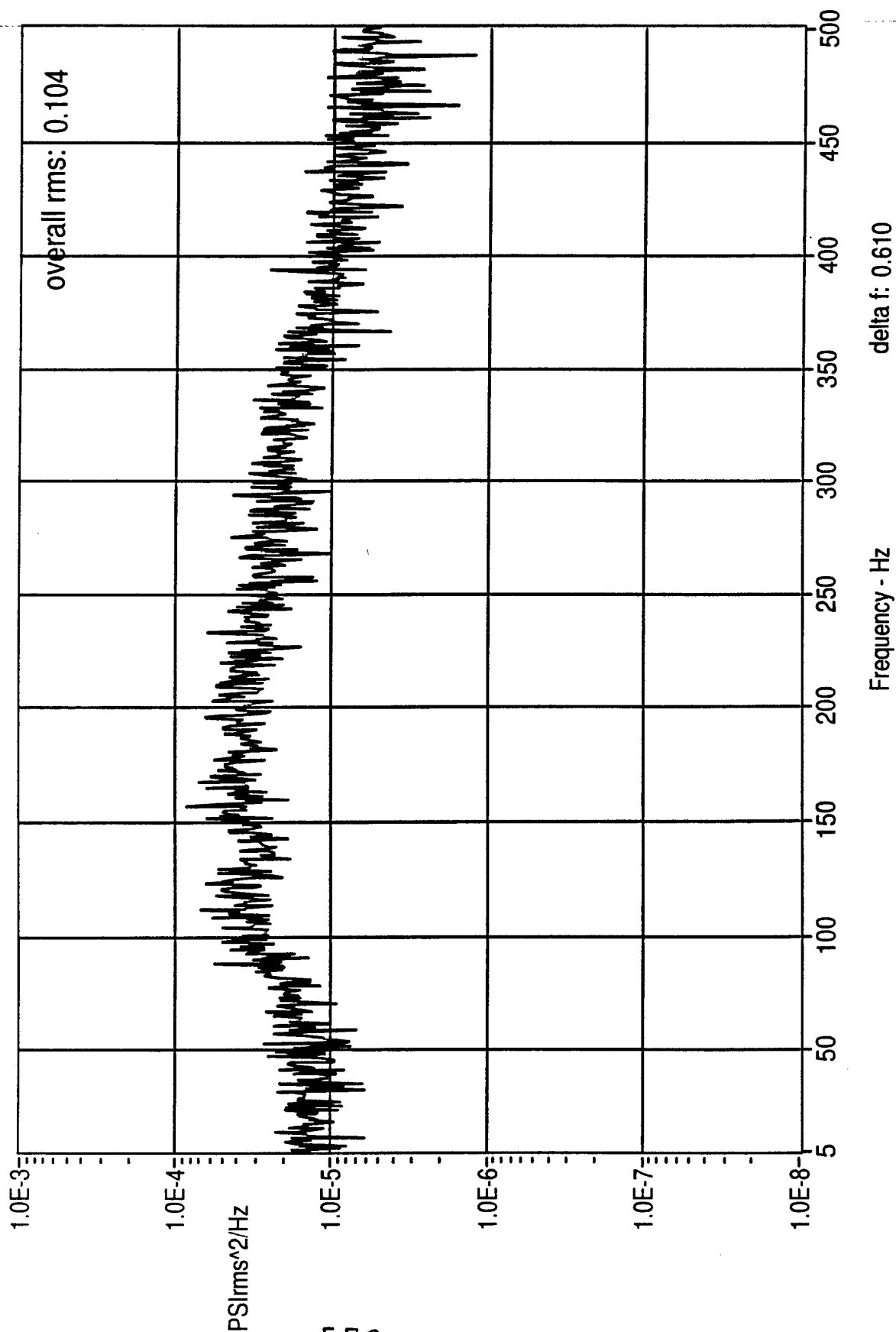
F-15 TPN\_3377: alpha=24 beta=-4 bp=45



F-15 TPN\_3379: alpha=32 beta=-4 bp=45

# Cross Power Spectrum

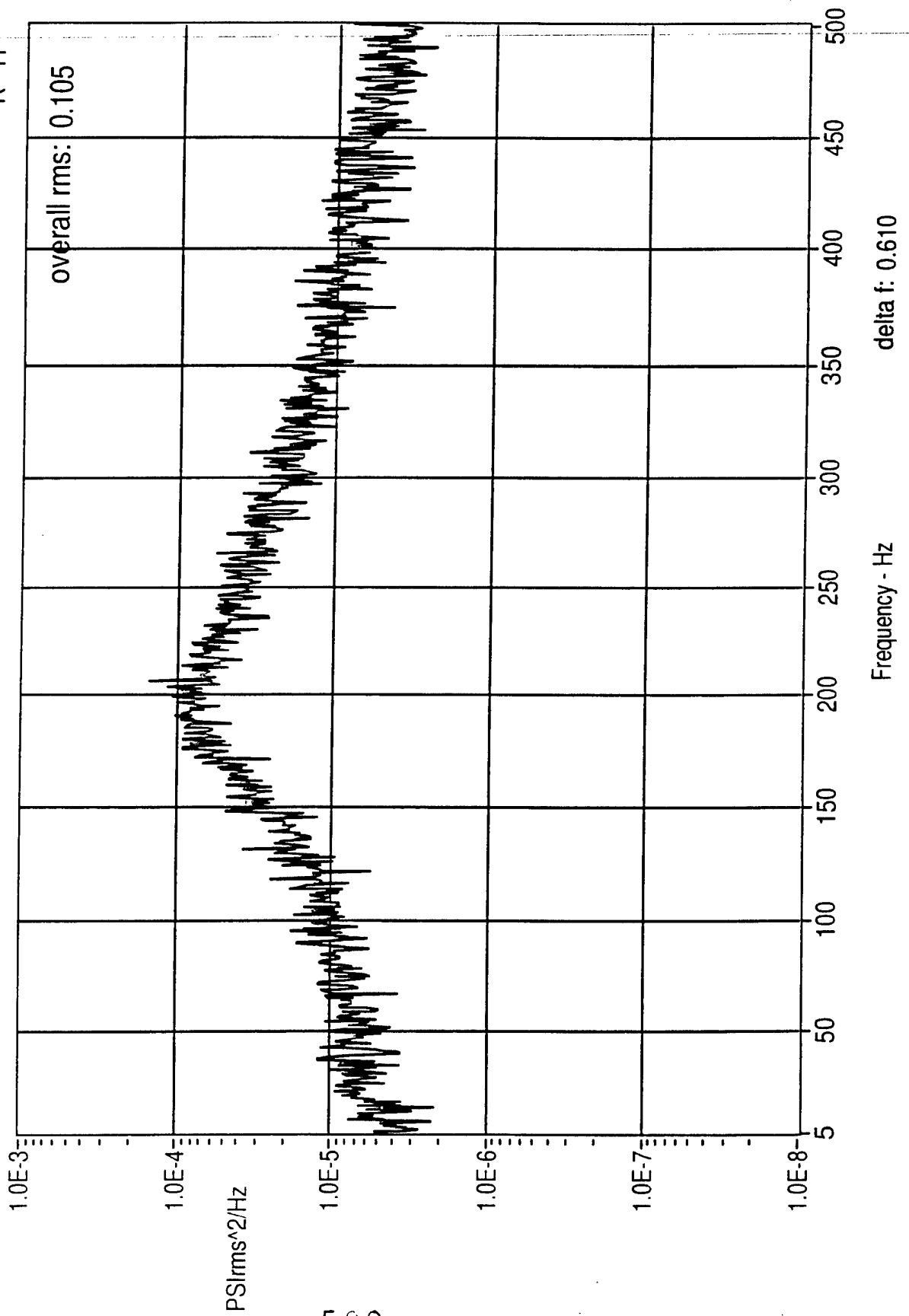
K - H



F-15 TPN\_3046: alpha=20 beta=4 bp=65

# Cross Power Spectrum

K - H

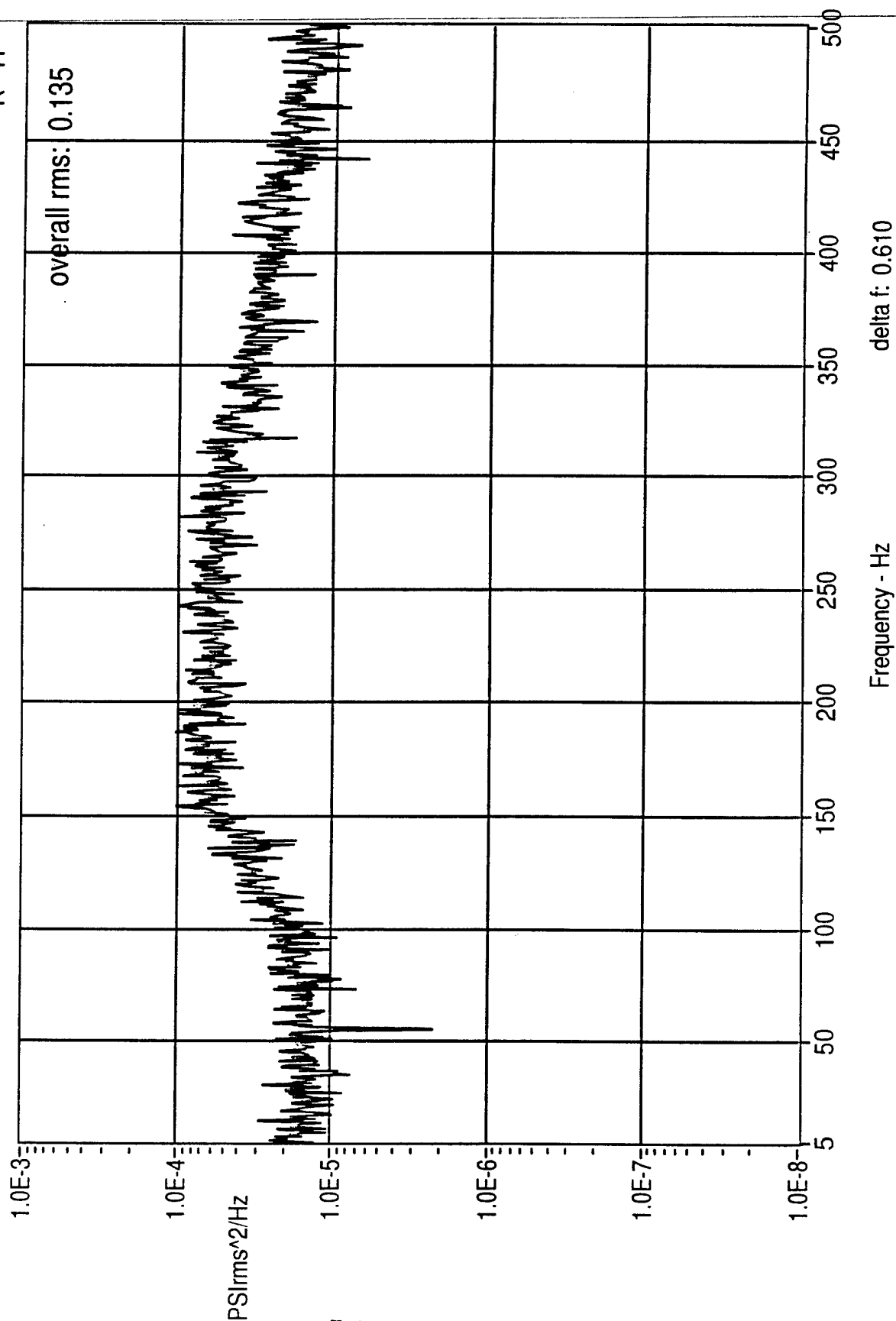




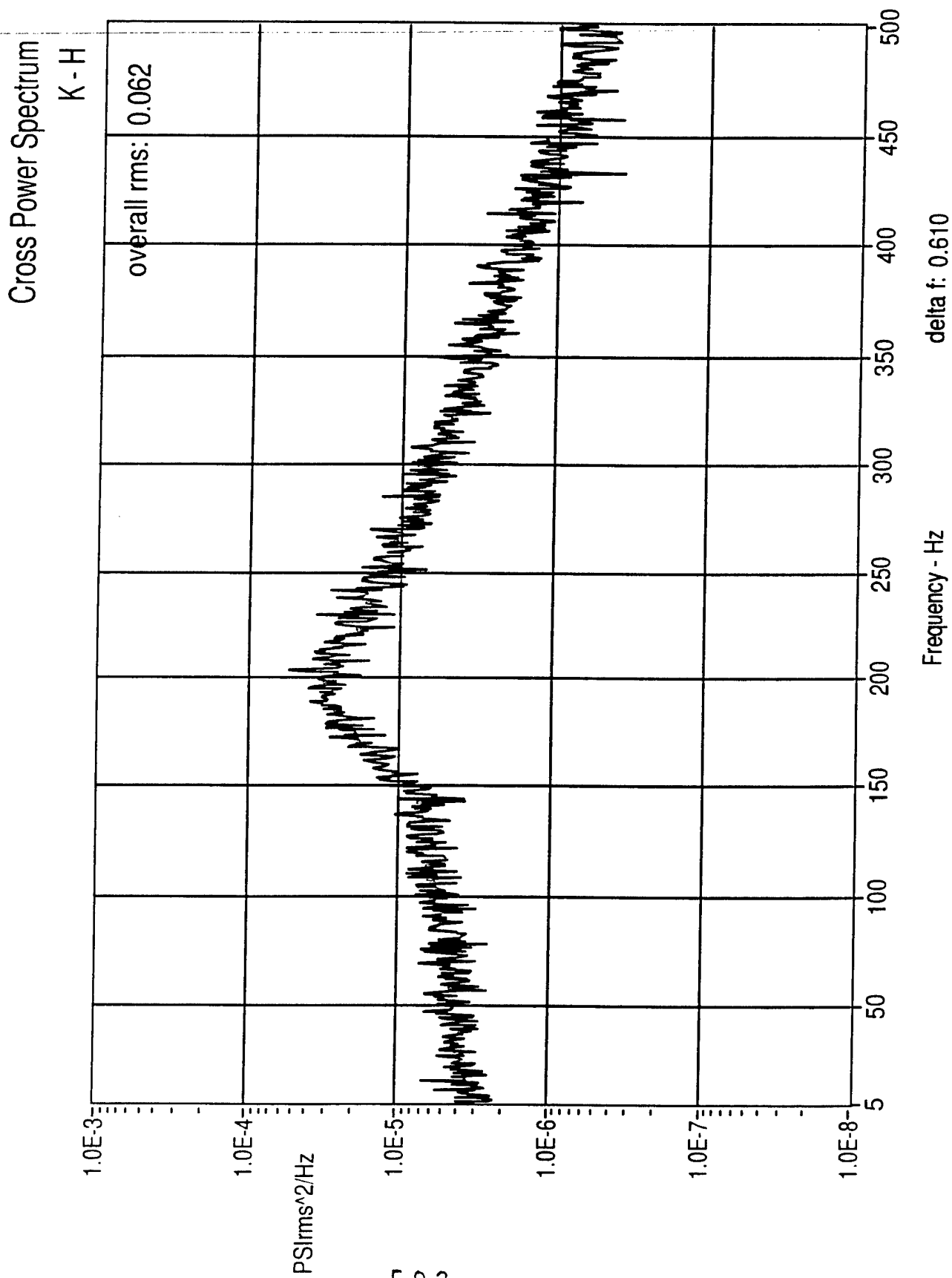
F-15 TPN\_3048: alpha=24 beta=4 bp=65

# Cross Power Spectrum

K - H



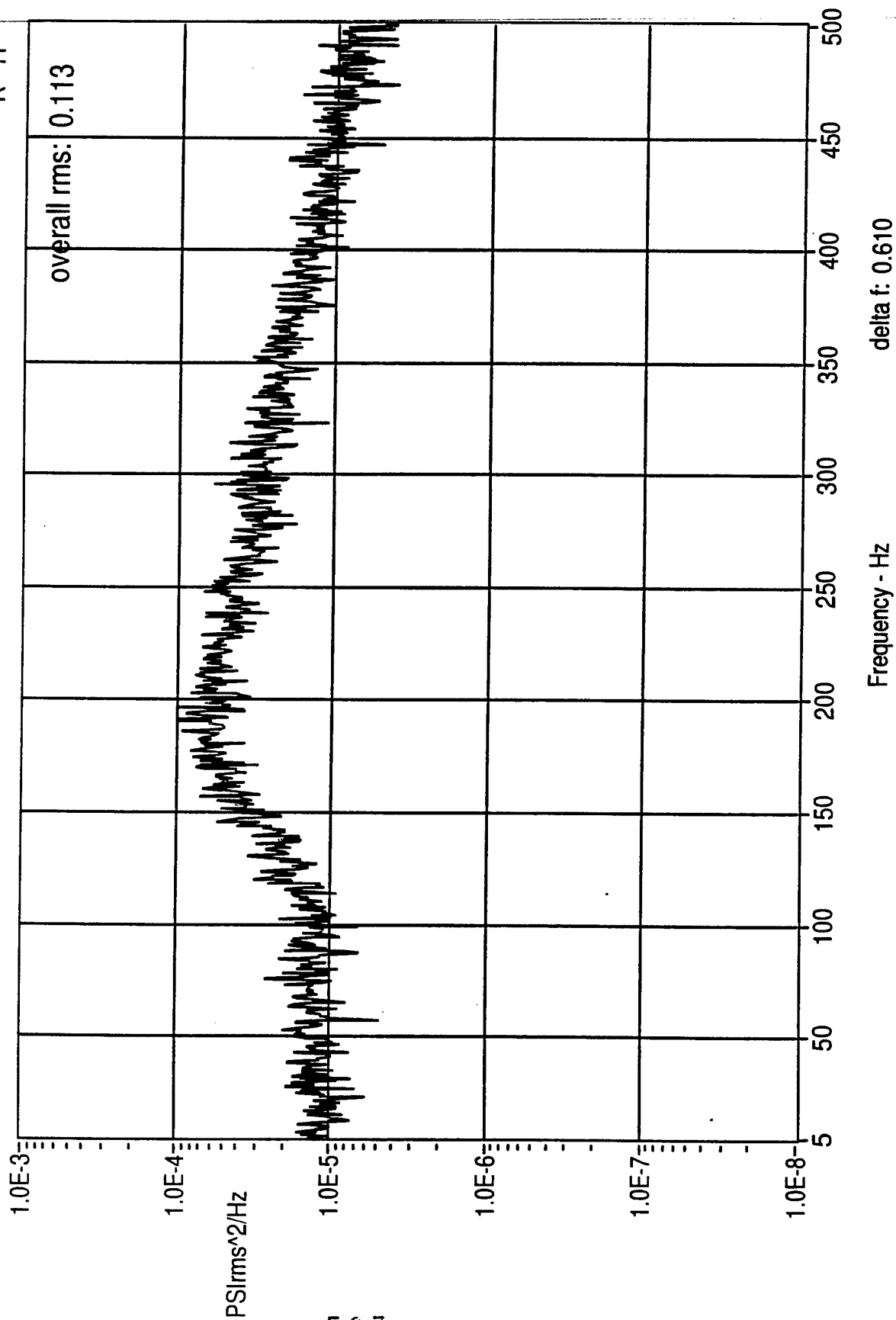
F-15 TPN\_3040: alpha=20 beta=0 bp=65



F-15 TPN\_3042: alpha=24 beta=0 bp=65

# Cross Power Spectrum

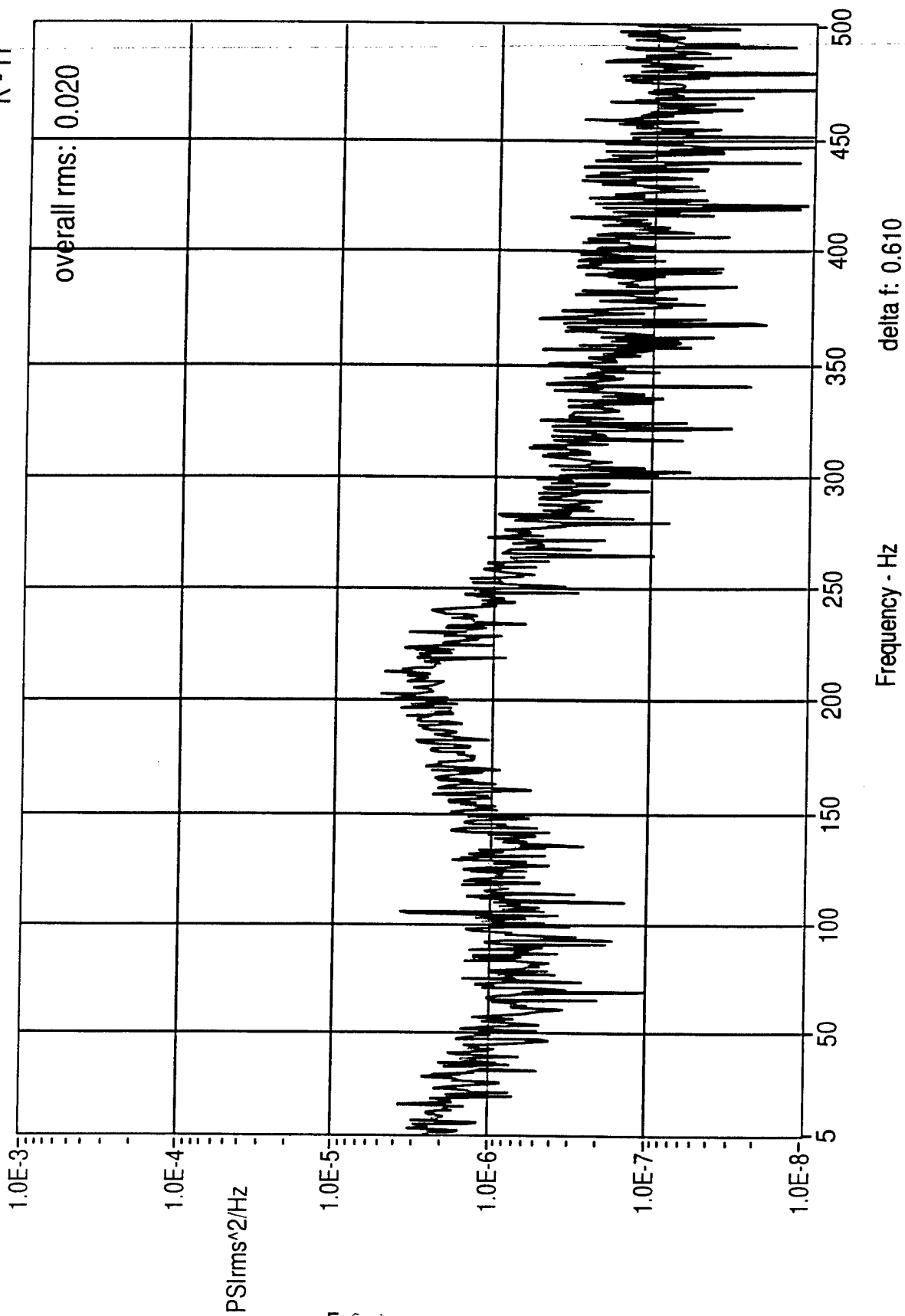
K - H



F-15 TPN\_3034: alpha=20 beta=-4 bp=65

# Cross Power Spectrum

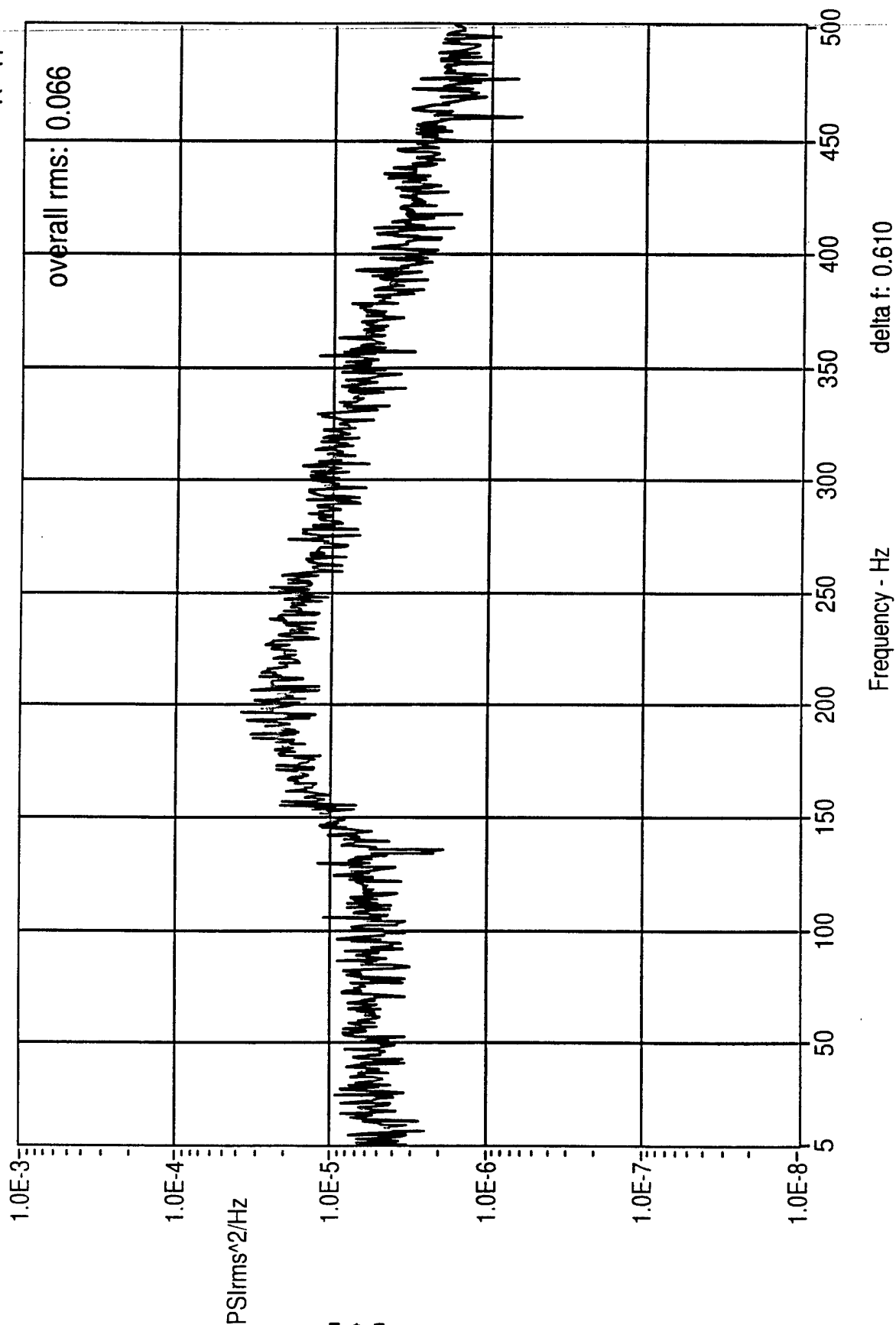
K - H



F-15 TPN\_3036: alpha=24 beta=-4 bp=65

# Cross Power Spectrum

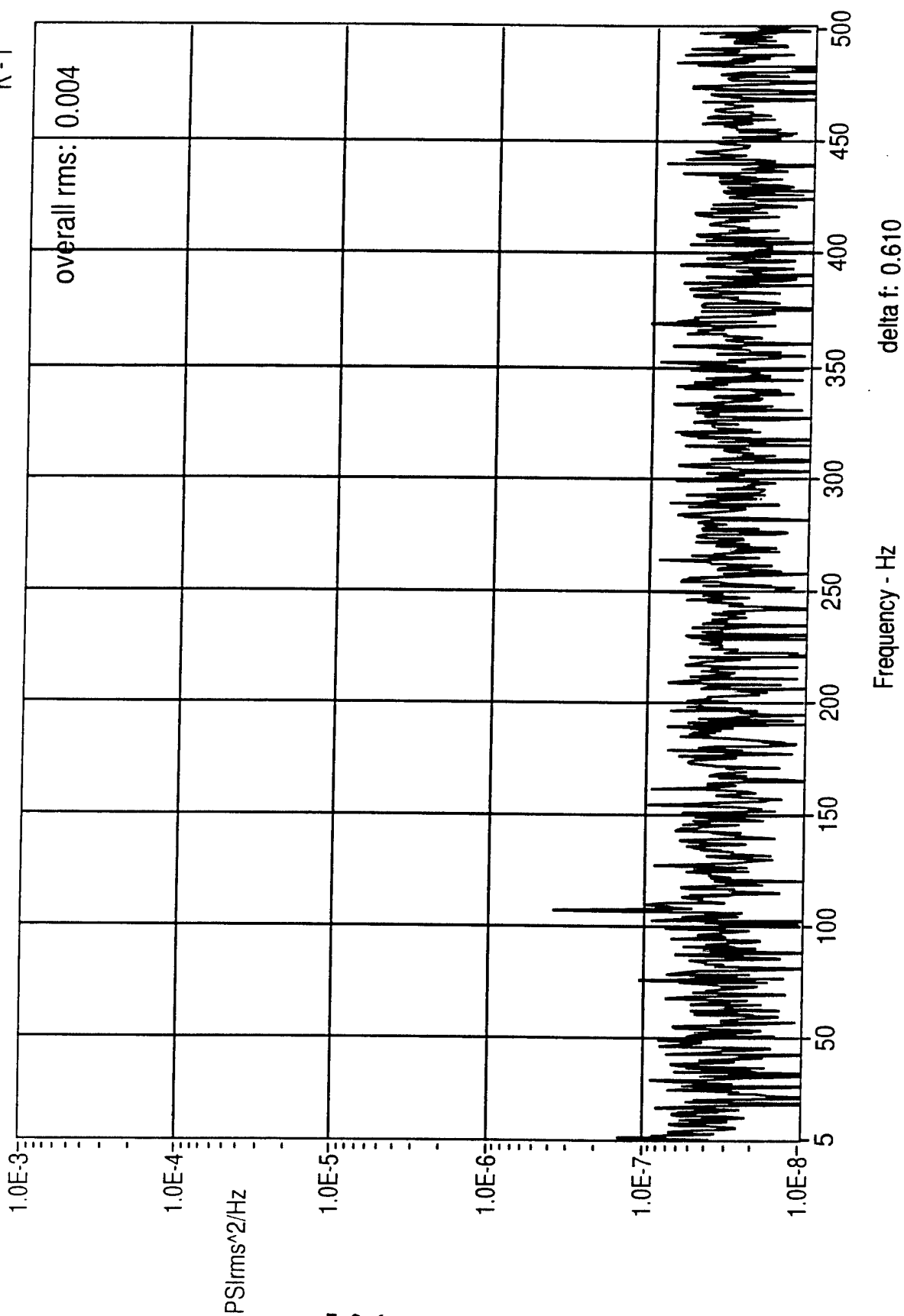
K - H



F-15 TPN\_2918: alpha=8 beta=4 bp=0

# Cross Power Spectrum

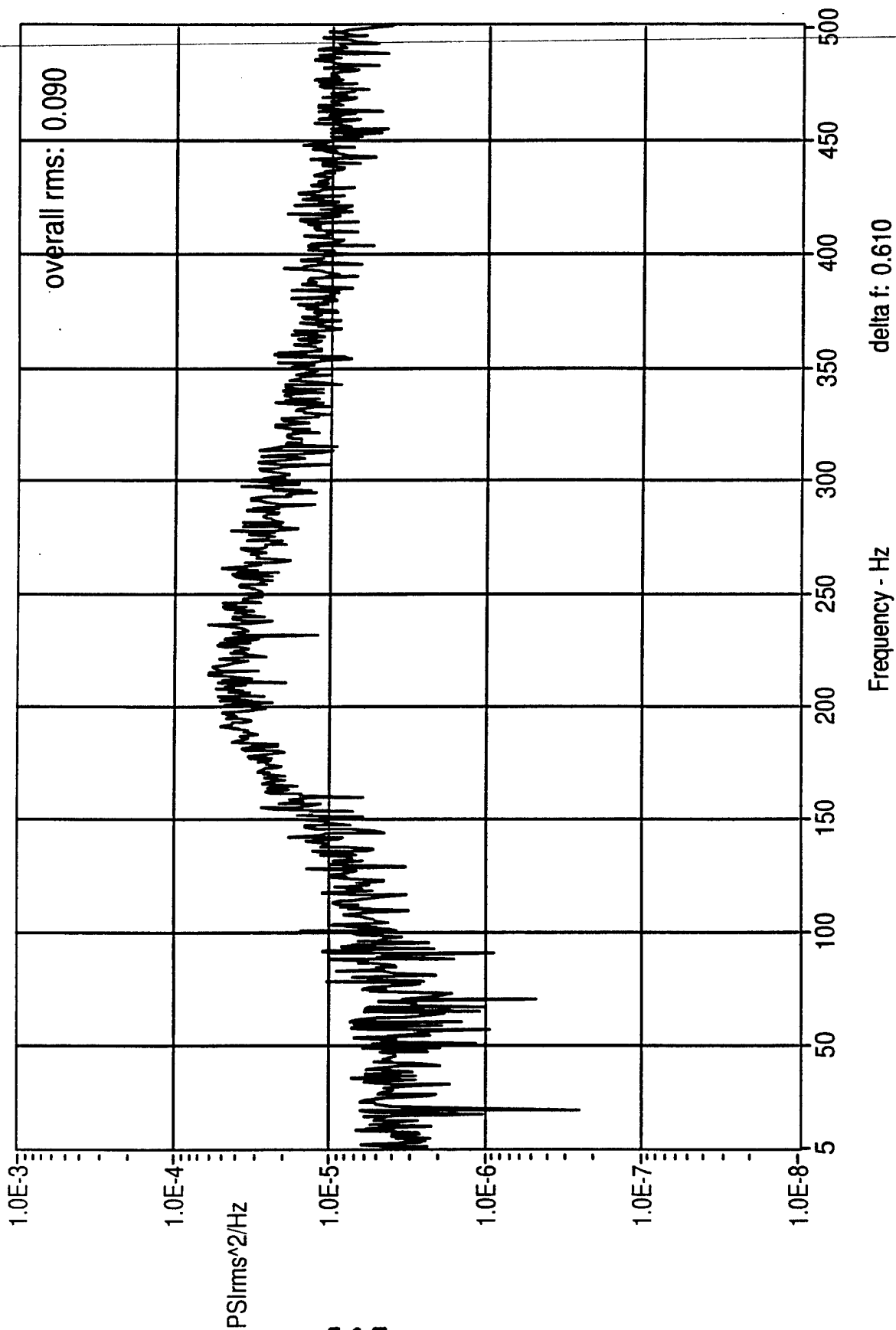
K - I



F-15 TPN\_2924: alpha=20 beta=4 bp=0

# Cross Power Spectrum

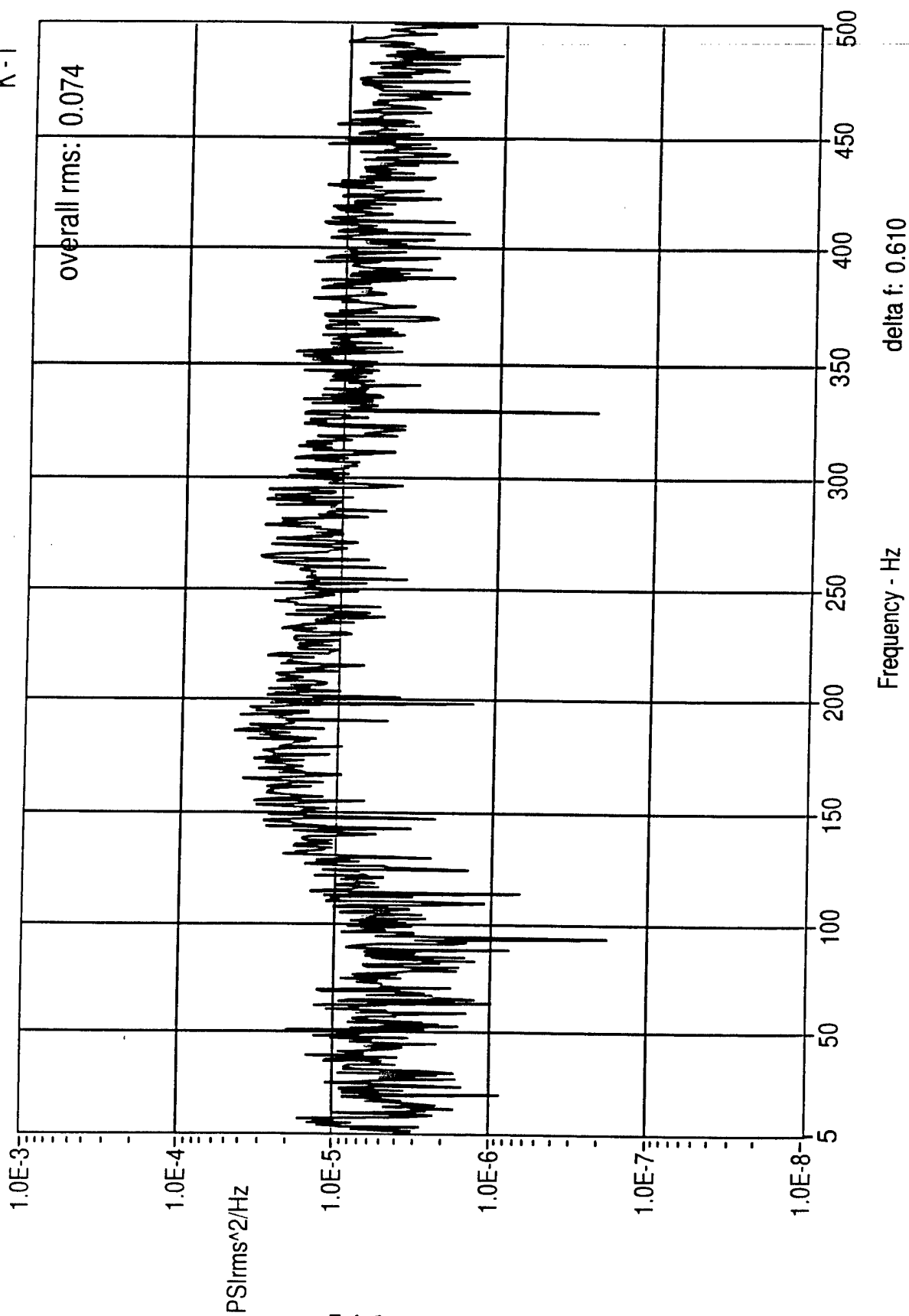
K - I



F-15 TPN\_2926: alpha=24 beta=4 bp=0

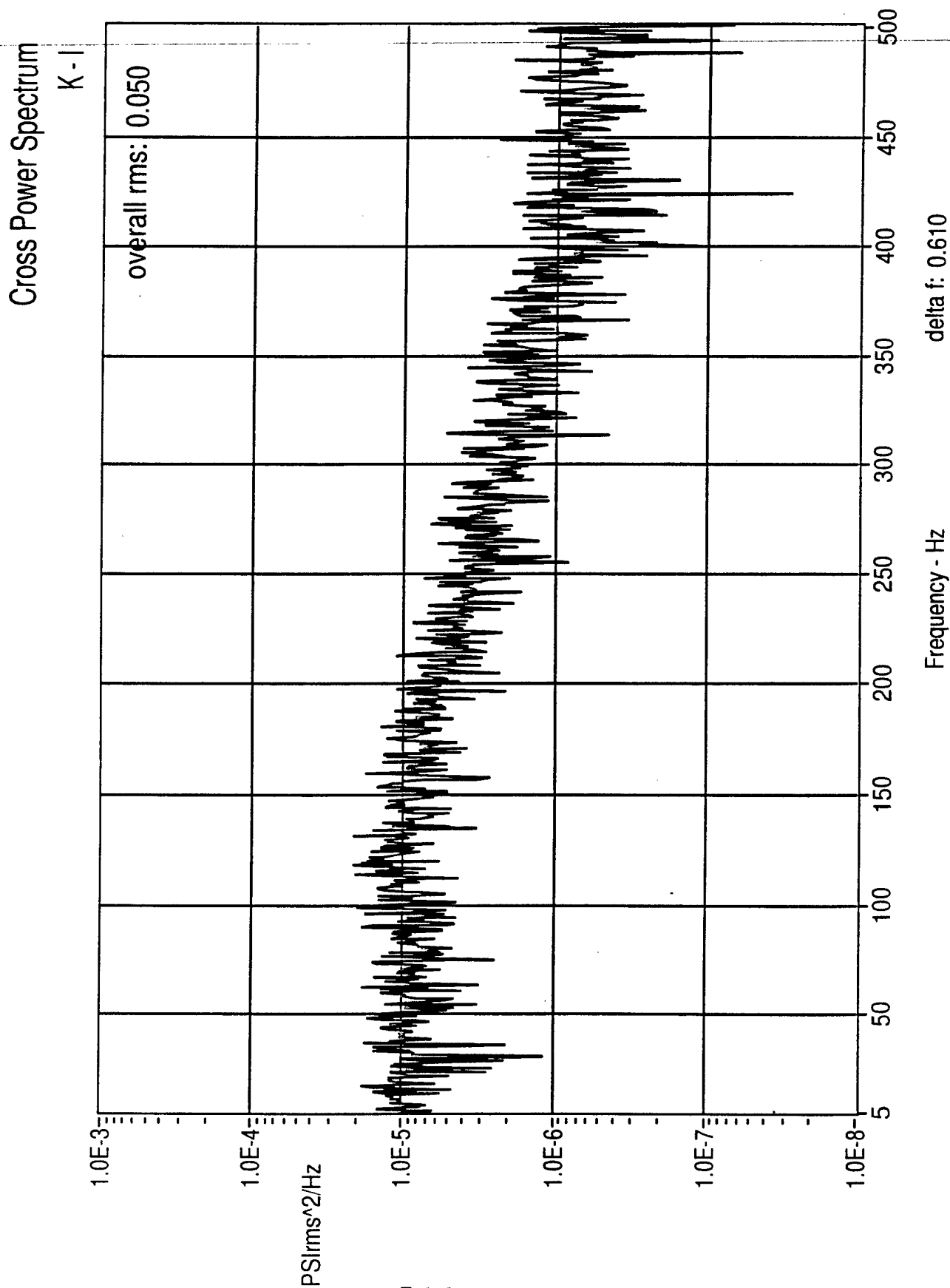
# Cross Power Spectrum

K - I

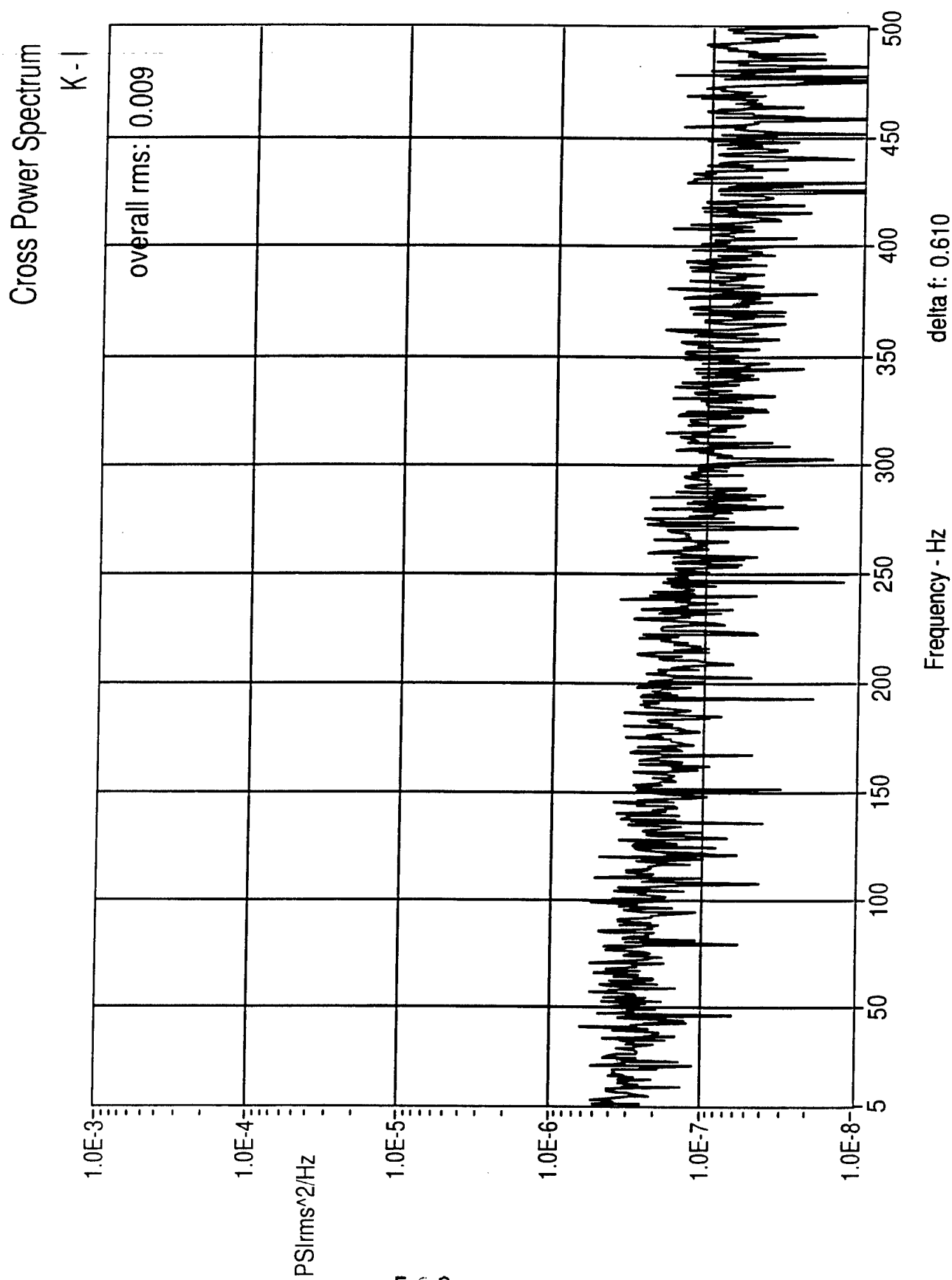




F-15 TPN\_2928: alpha=32 beta=4 bp=0



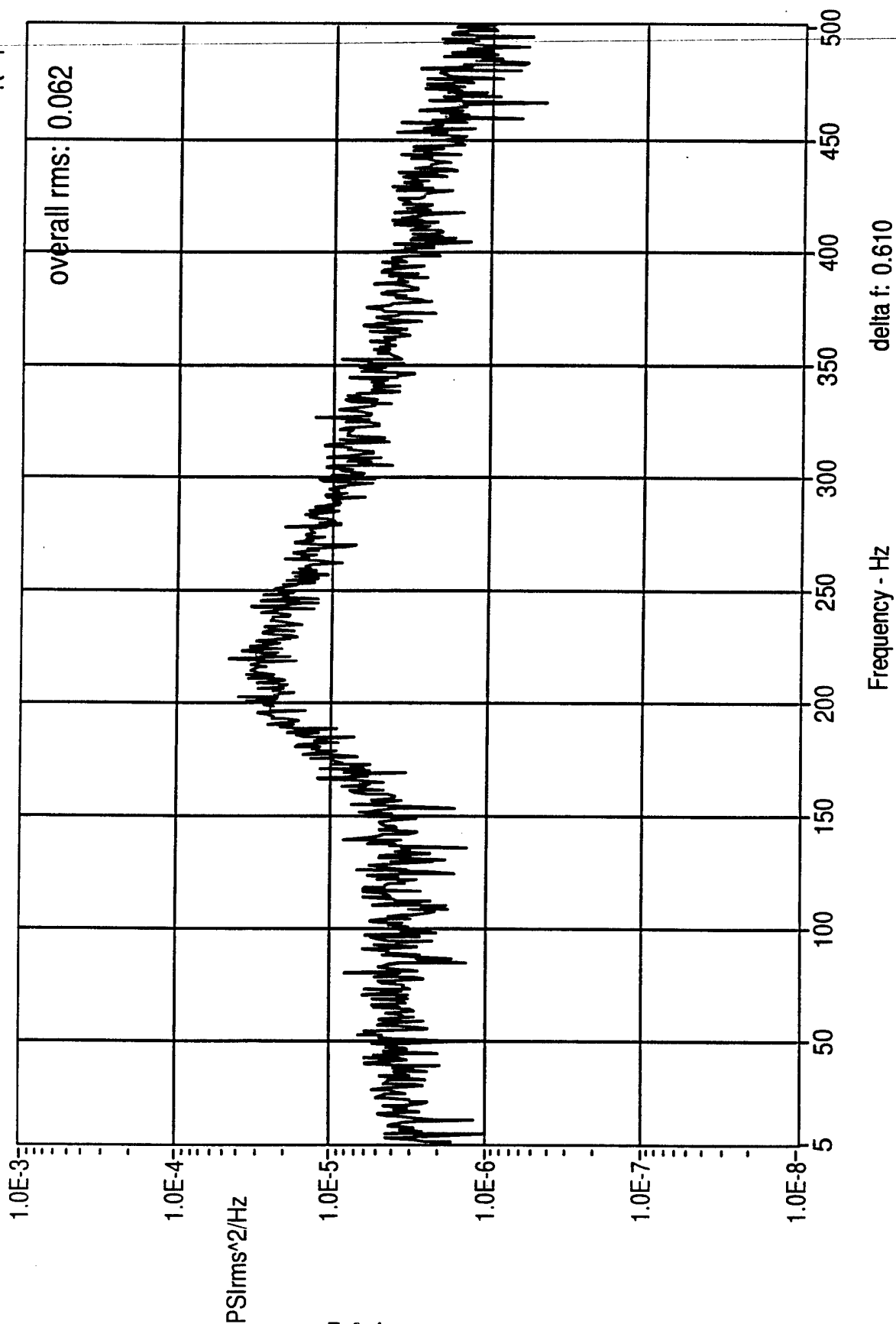
F-15 TPN\_2844: alpha=8 beta=0 bp=0



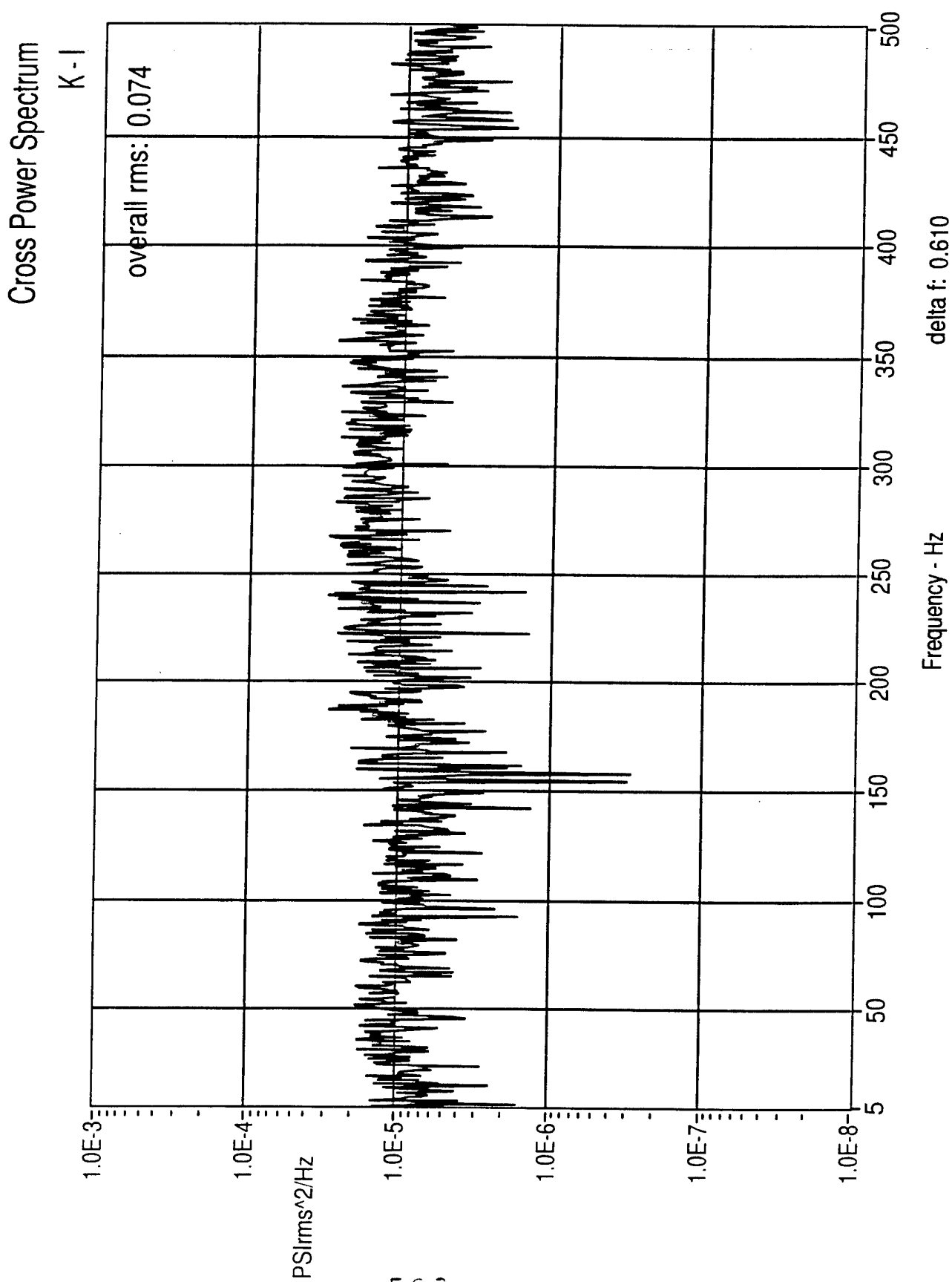
F-15 TPN\_2850: alpha=20 beta=0 bp=0

# Cross Power Spectrum

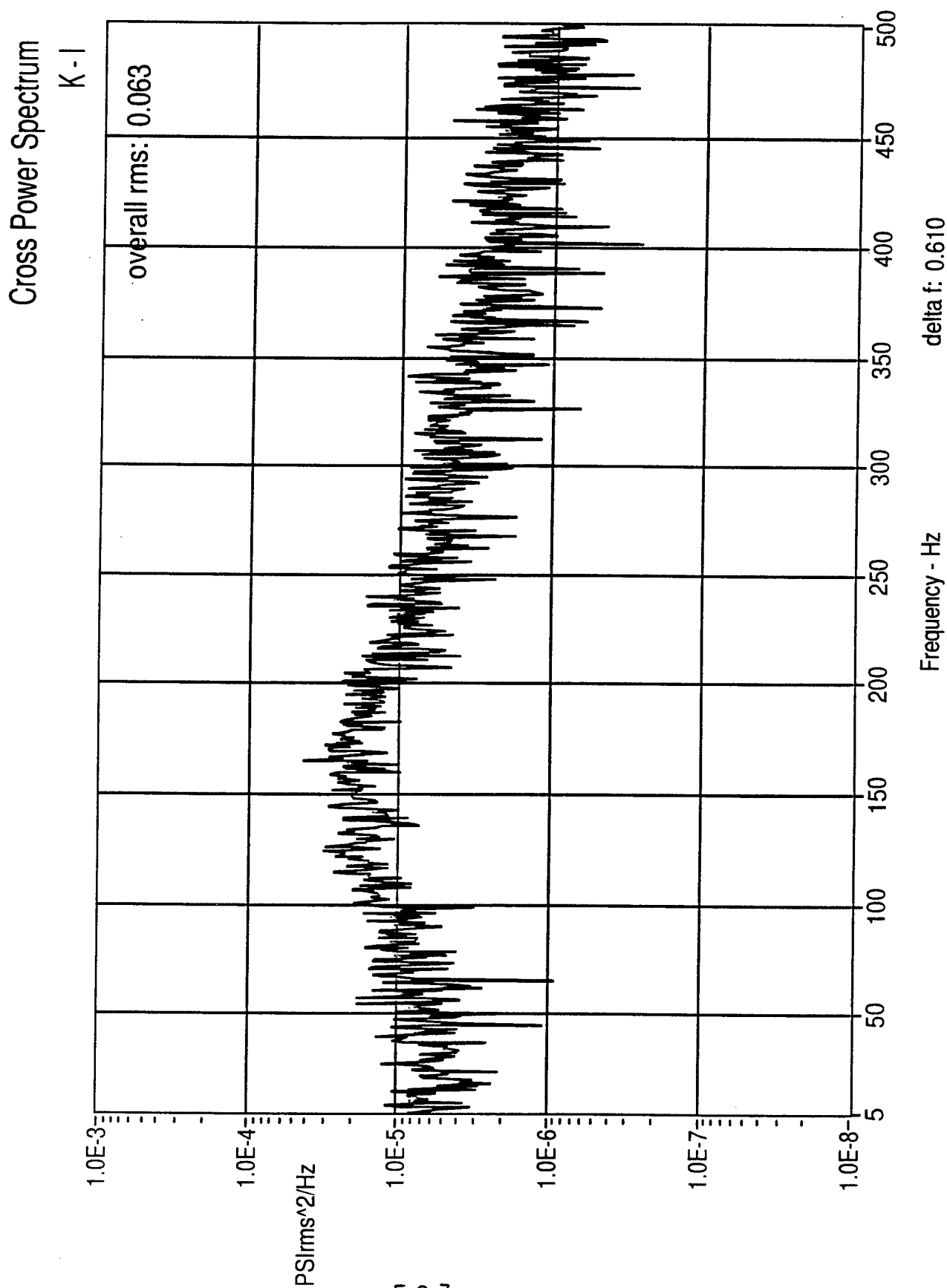
K - I



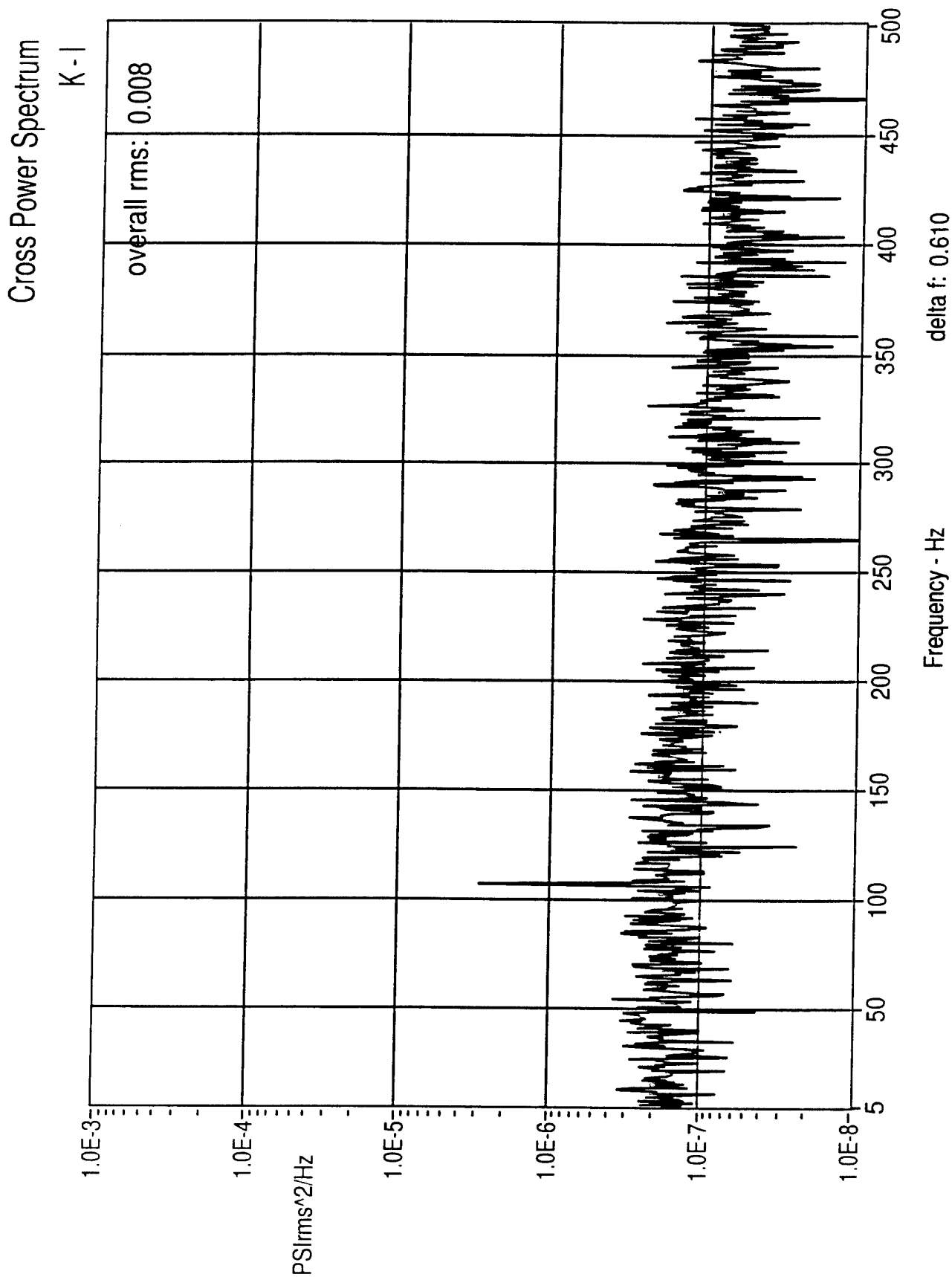
F-15 TPN\_2852: alpha=24 beta=0 bp=0



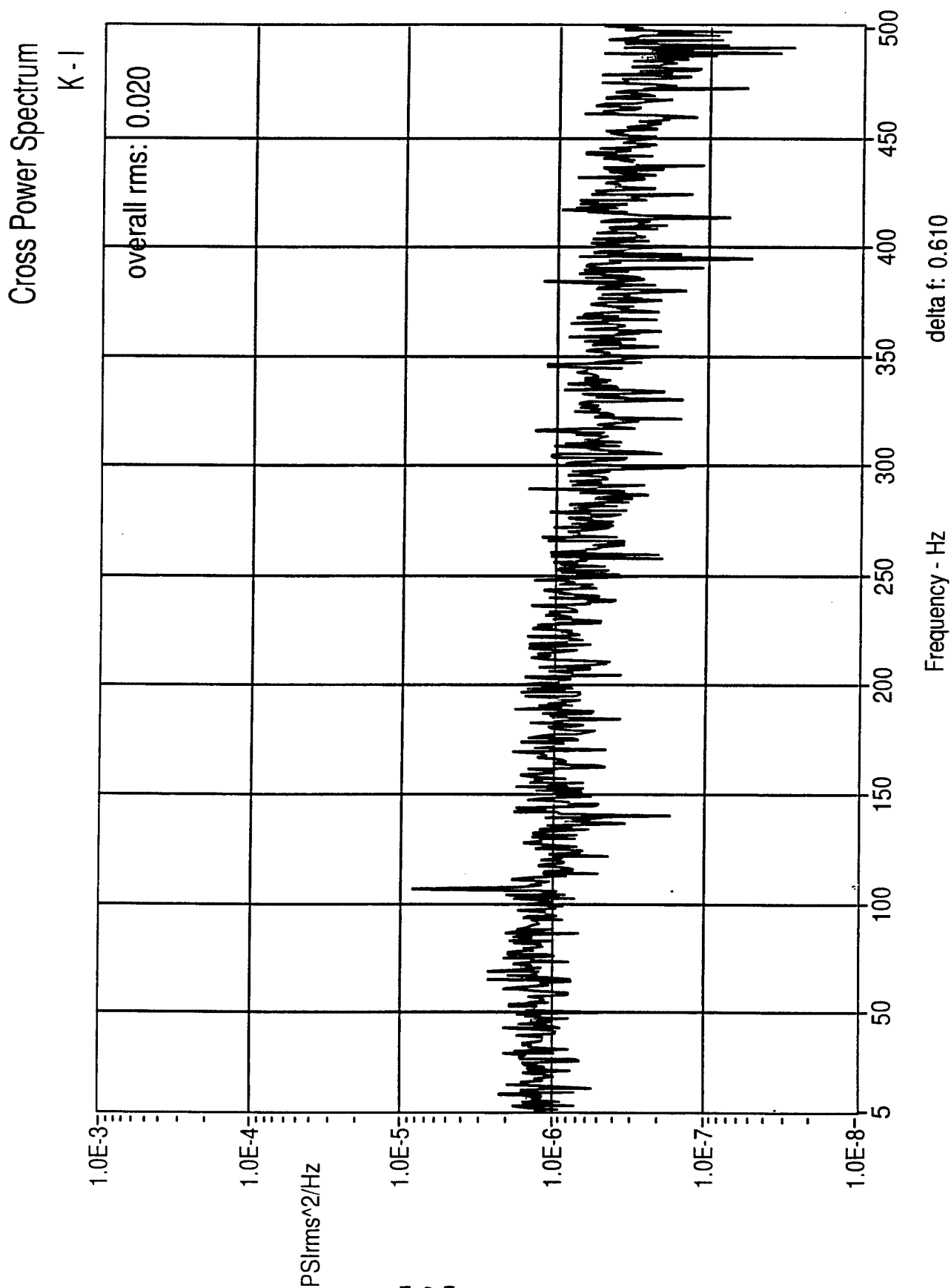
F-15 TPN\_2854: alpha=32 beta=0 bp=0



F-15 TPN\_2864: alpha=8 beta=-4 bp=0



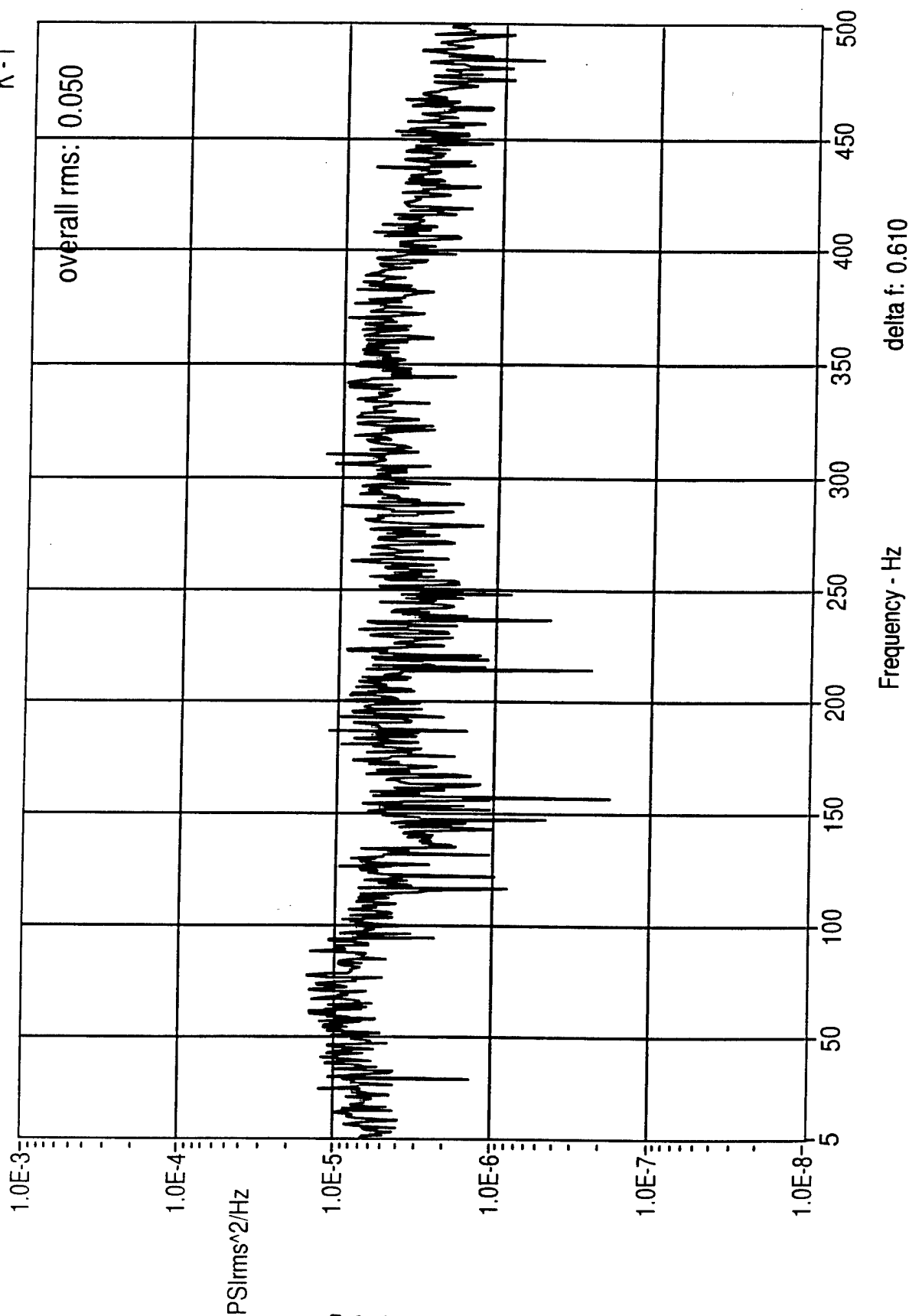
F-15 TPN\_2870: alpha=20 beta=-4 bp=0



F-15 TPN\_2872: alpha=24 beta=-4 bp=0

# Cross Power Spectrum

K - I

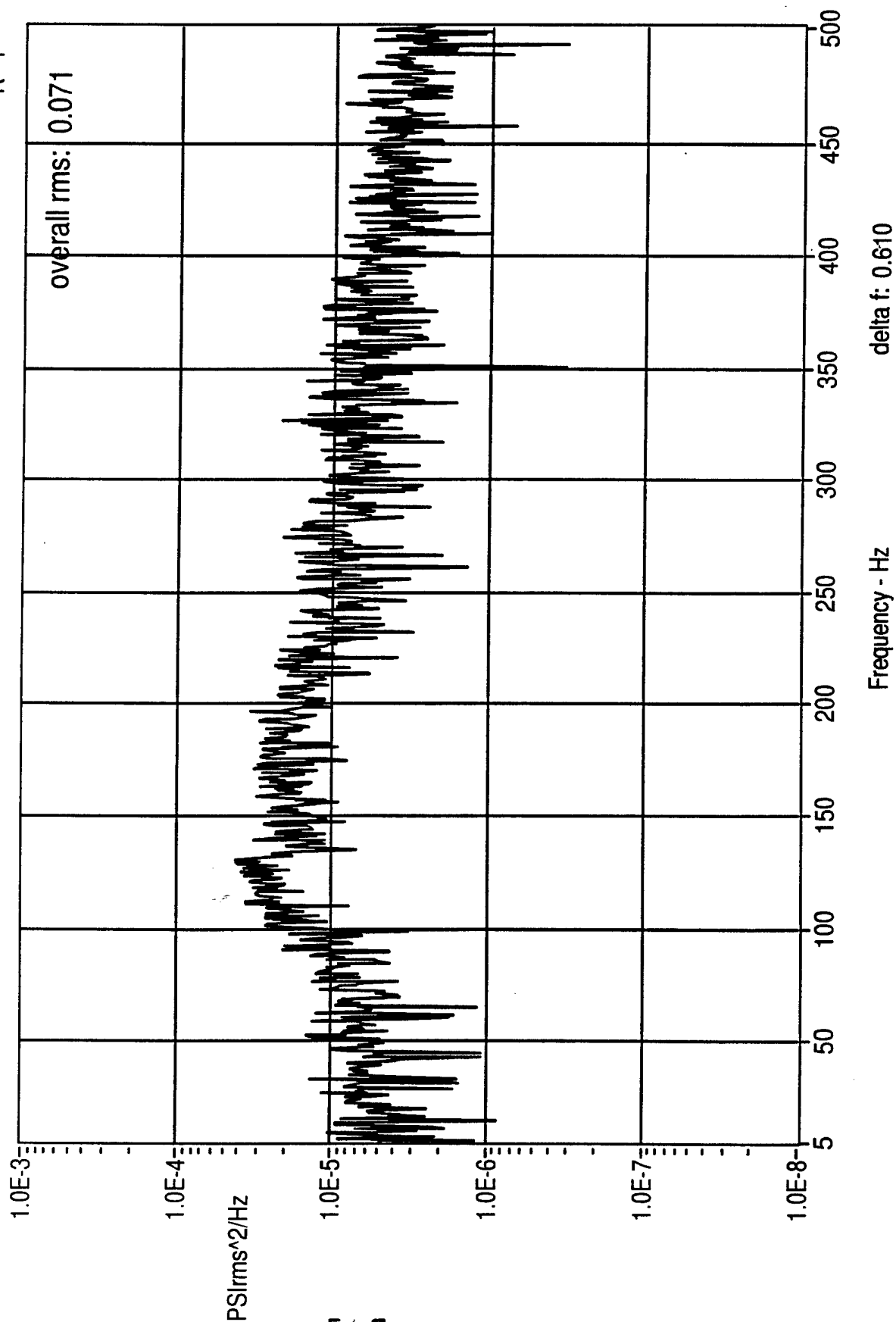




F-15 TPN\_2874: alpha=32 beta=-4 bp=0

# Cross Power Spectrum

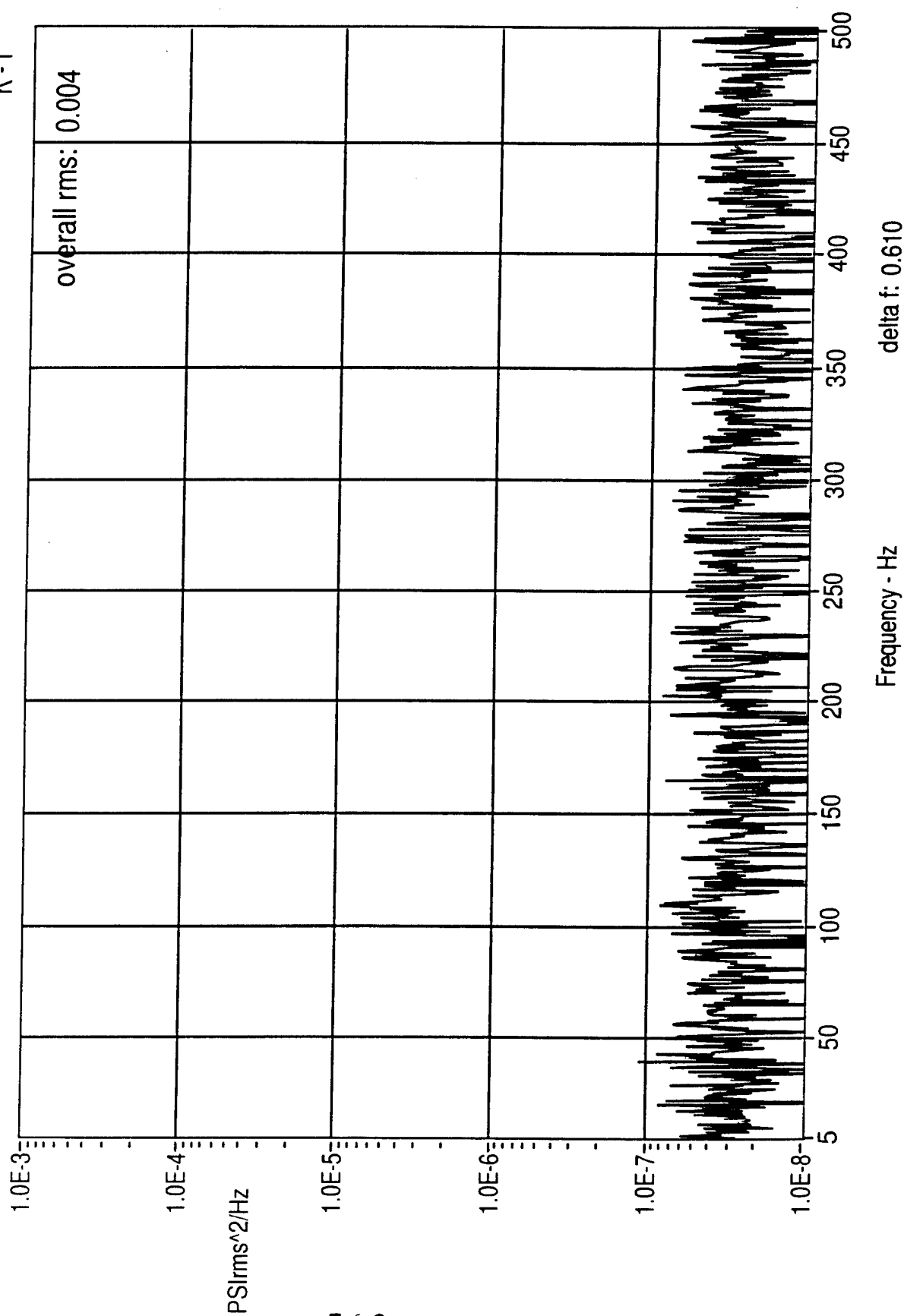
K - I



F-15 TPN\_3351: alpha=8 beta=4 bp=45

# Cross Power Spectrum

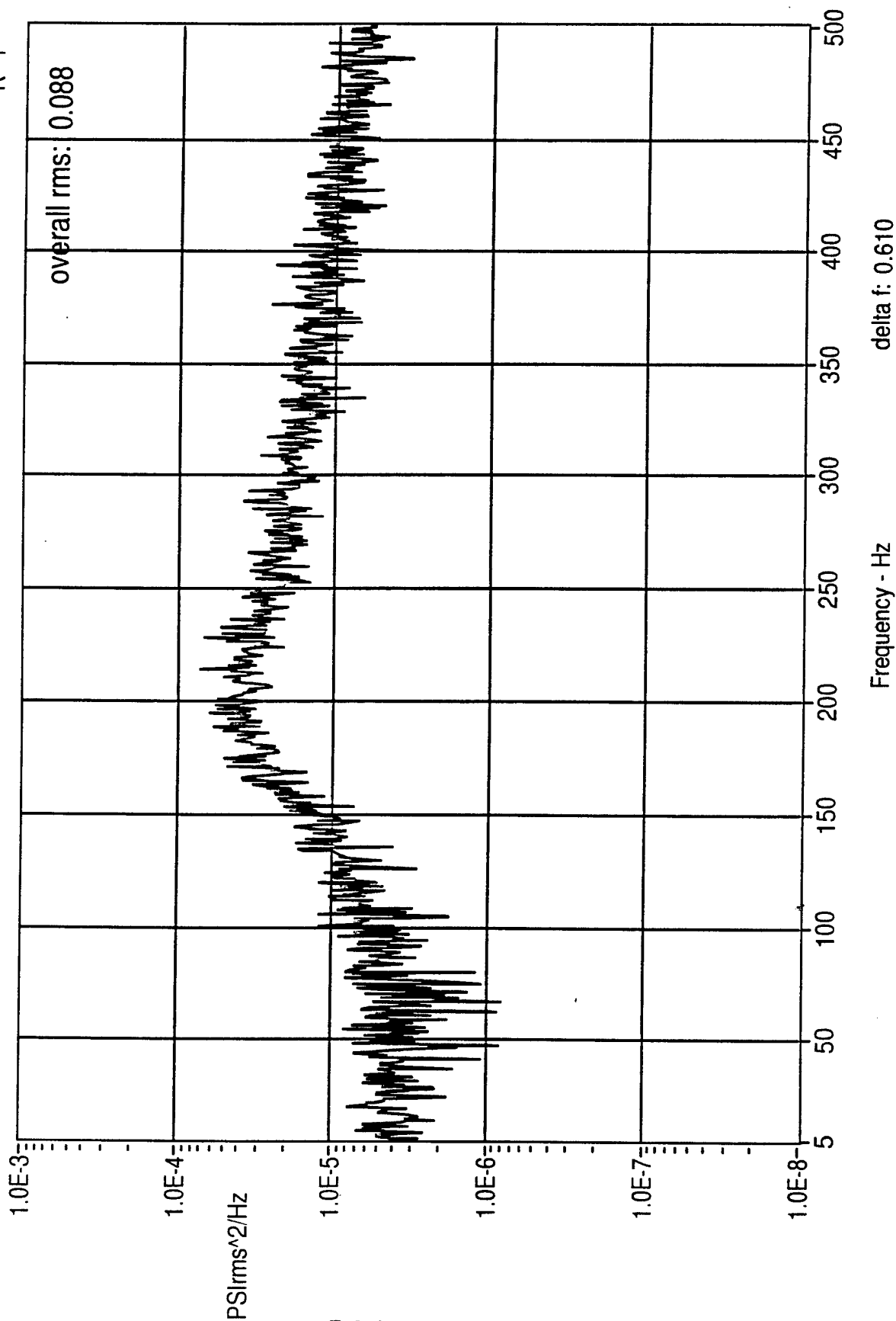
K - I



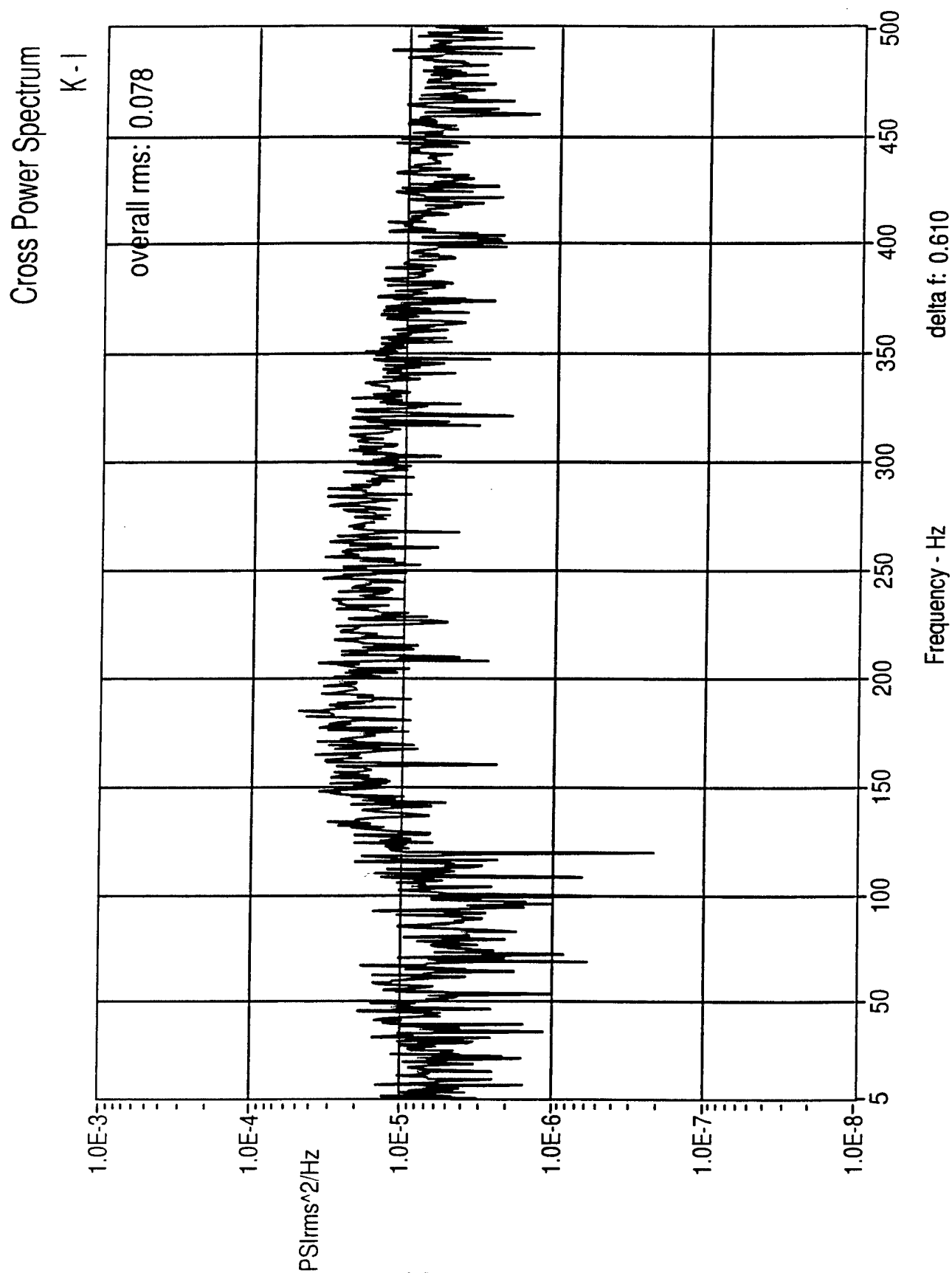
F-15 TPN\_3357: alpha=20 beta=4 bp=45

# Cross Power Spectrum

K - I



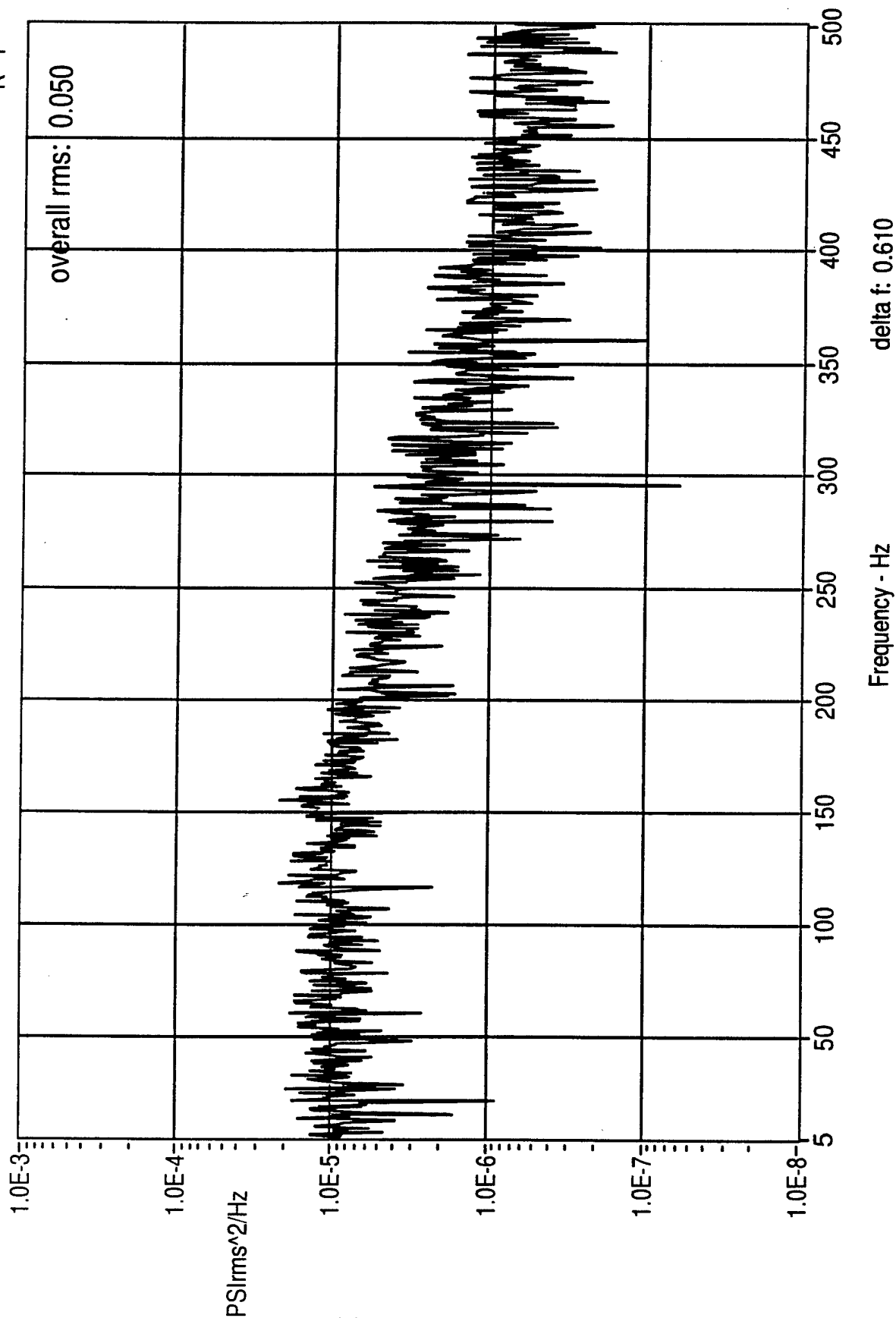
F-15 TPN\_3359: alpha=24 beta=4 bp=45



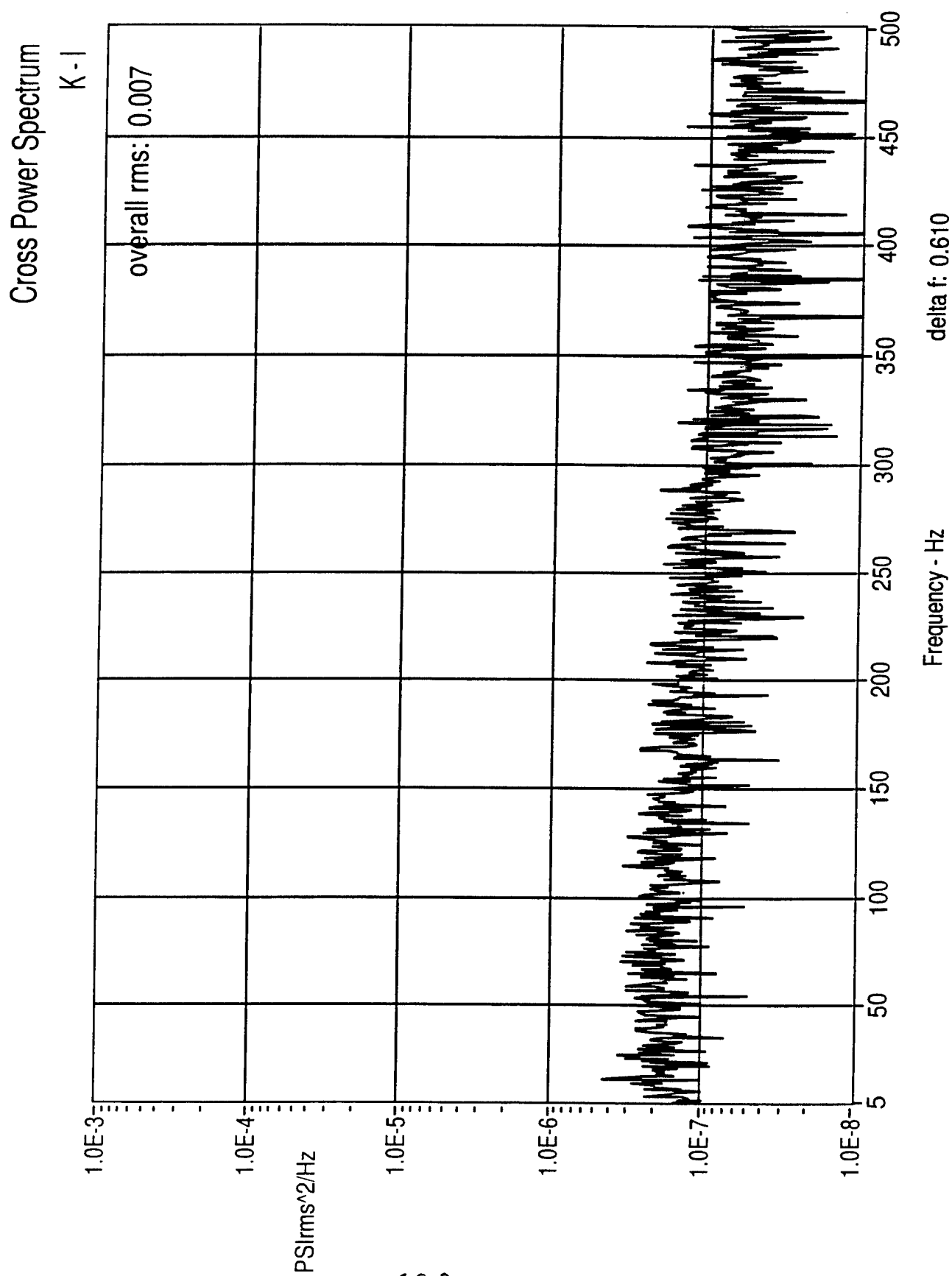
F-15 TPN\_3361:alpha=32 beta=4 bp=45

# Cross Power Spectrum

K - I



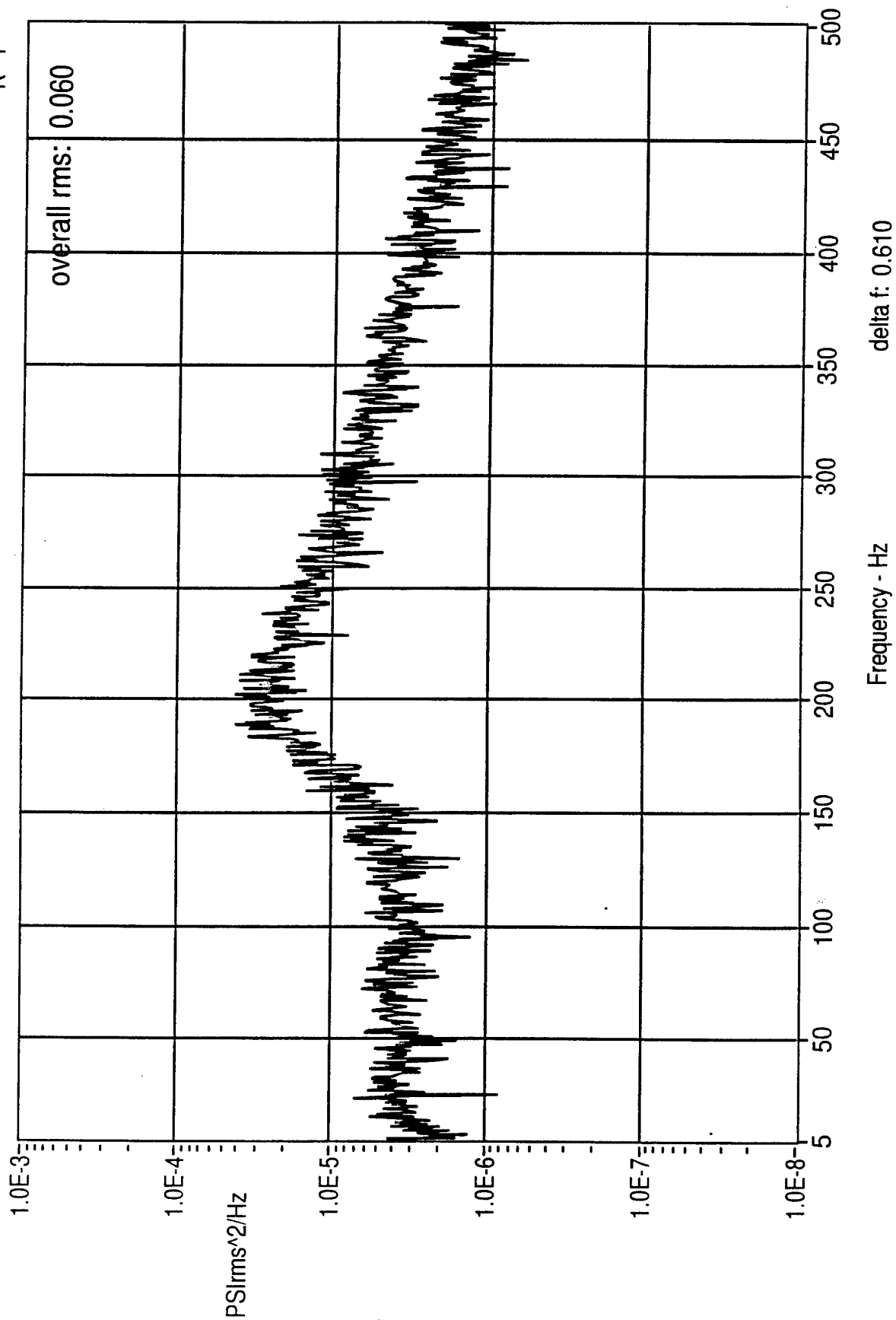
F-15 TPN\_3333: alpha=8 beta=0 bp=45



F-15 TPN\_3339: alpha=20 beta=0 bp=45

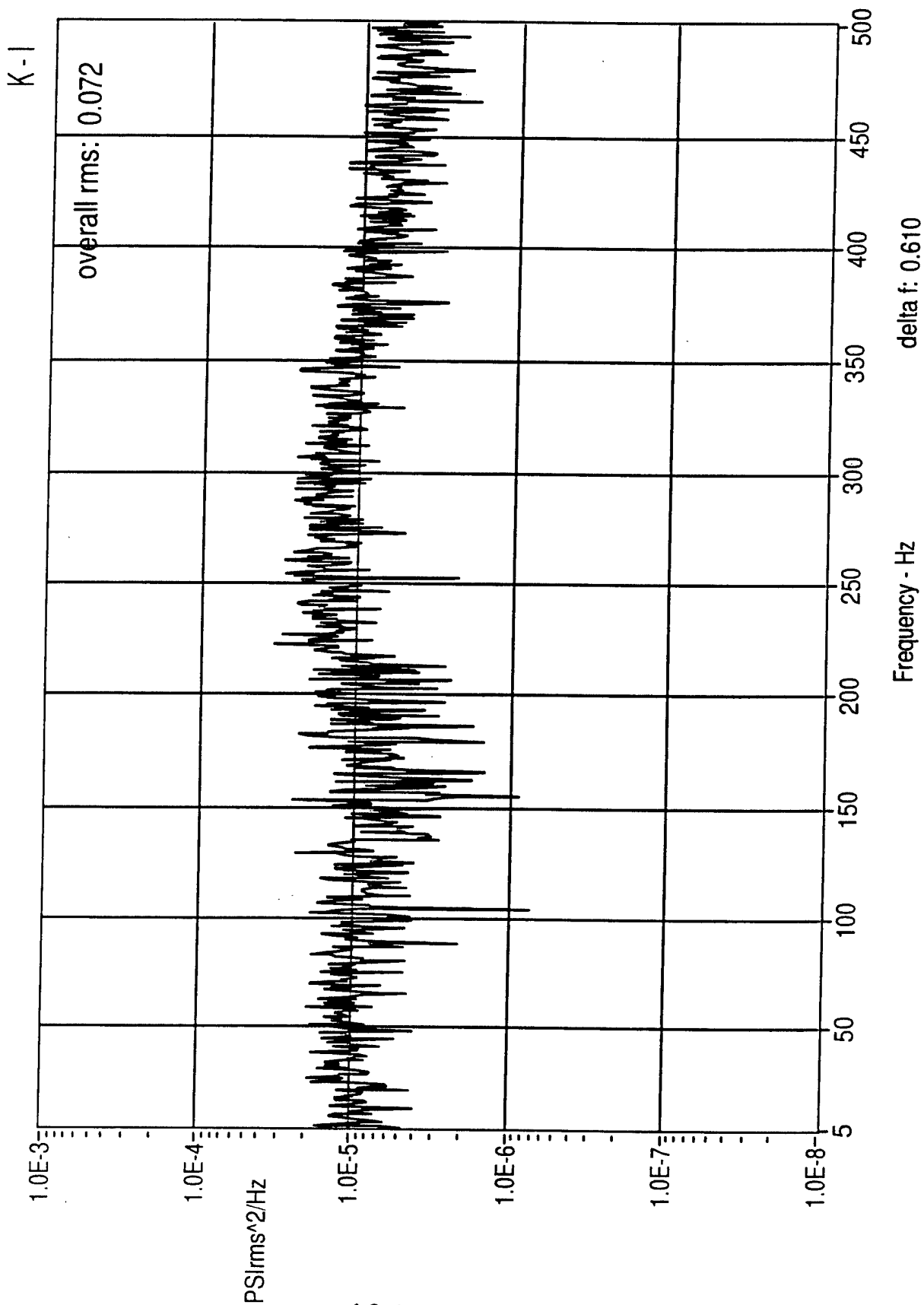
# Cross Power Spectrum

K-I



F-15 TPN\_3341:alpha=24 beta=0 bp=45

# Cross Power Spectrum

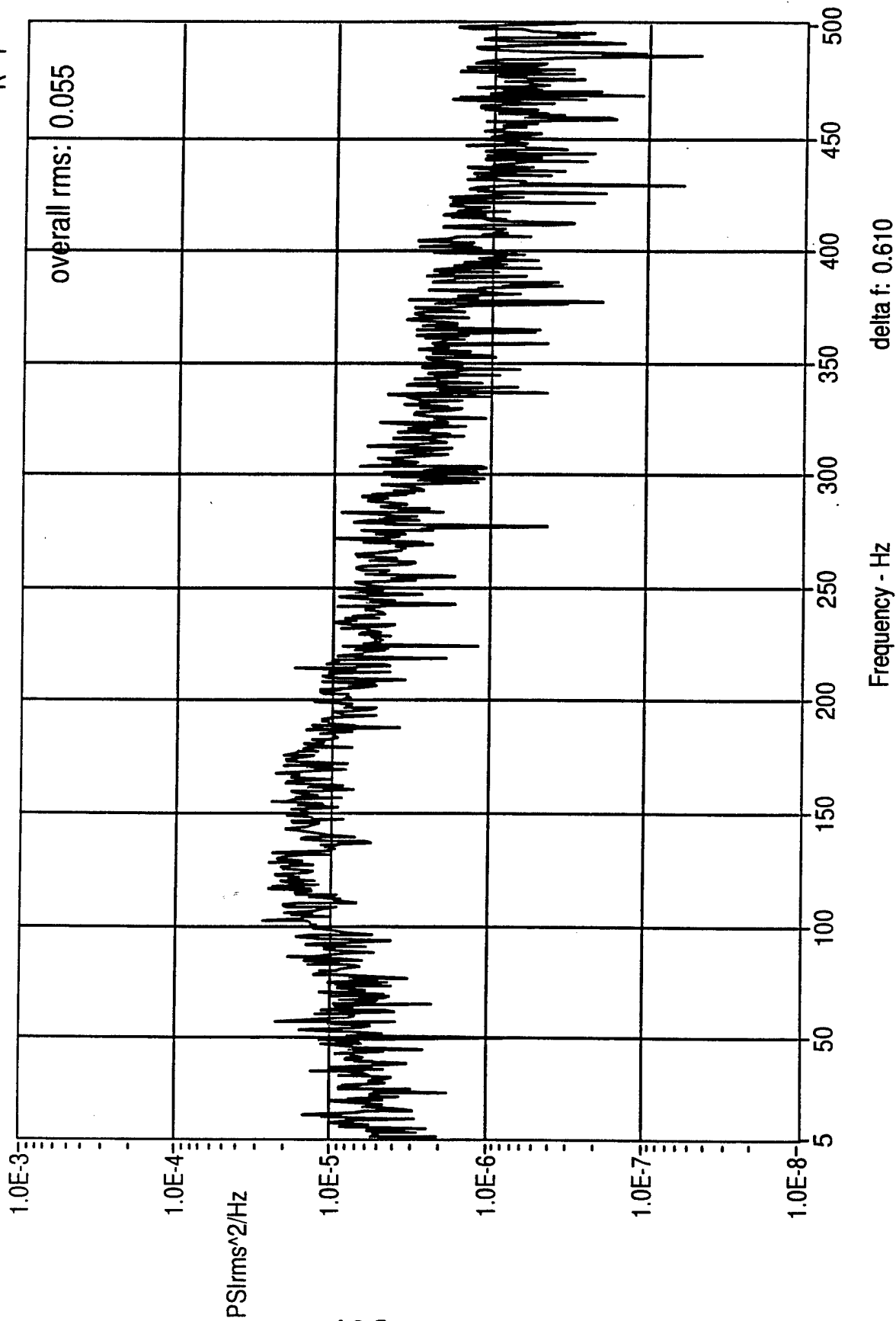




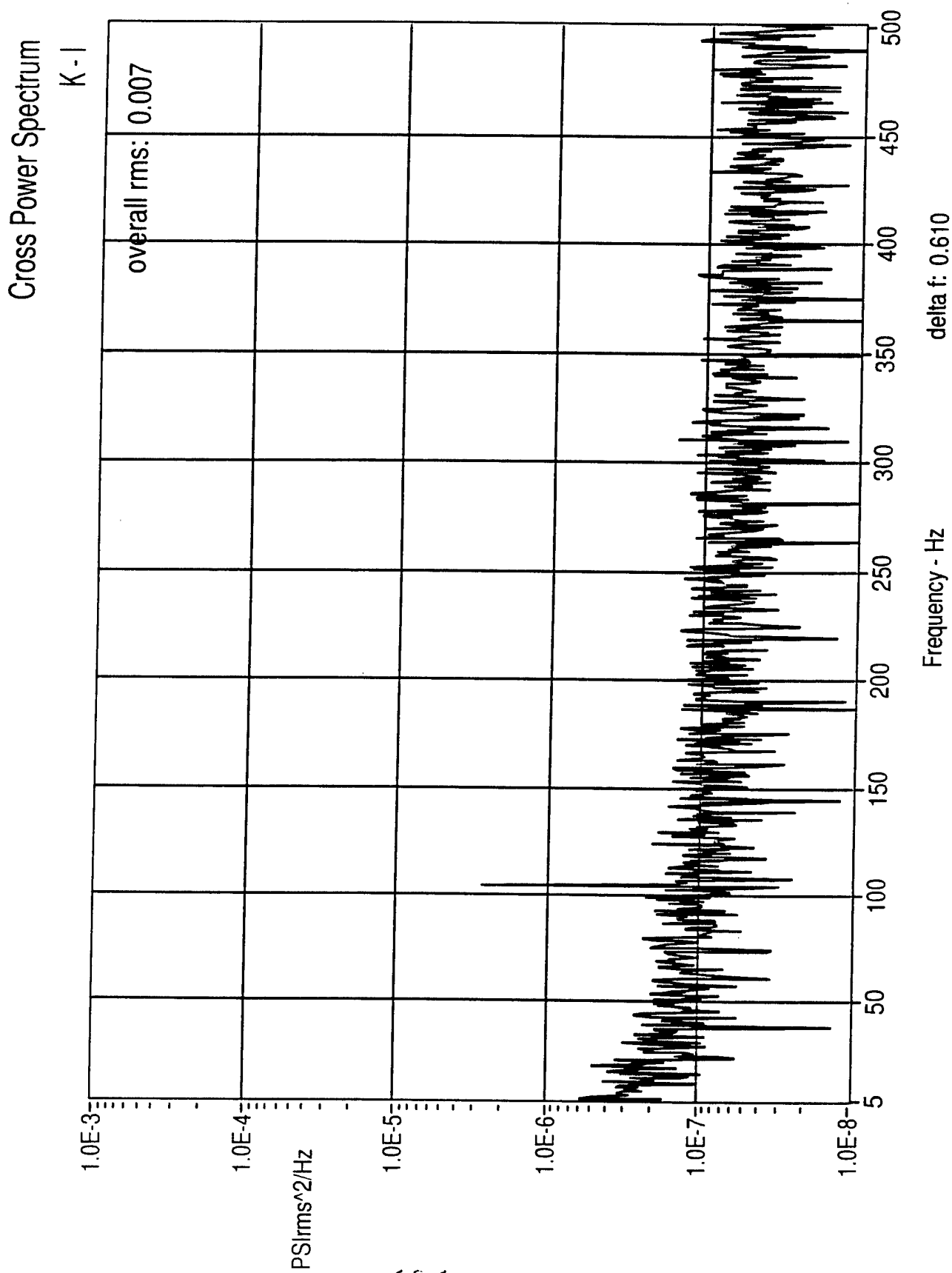
F-15 TPN\_3343: alpha=32 beta=0 bp=45

# Cross Power Spectrum

K - I



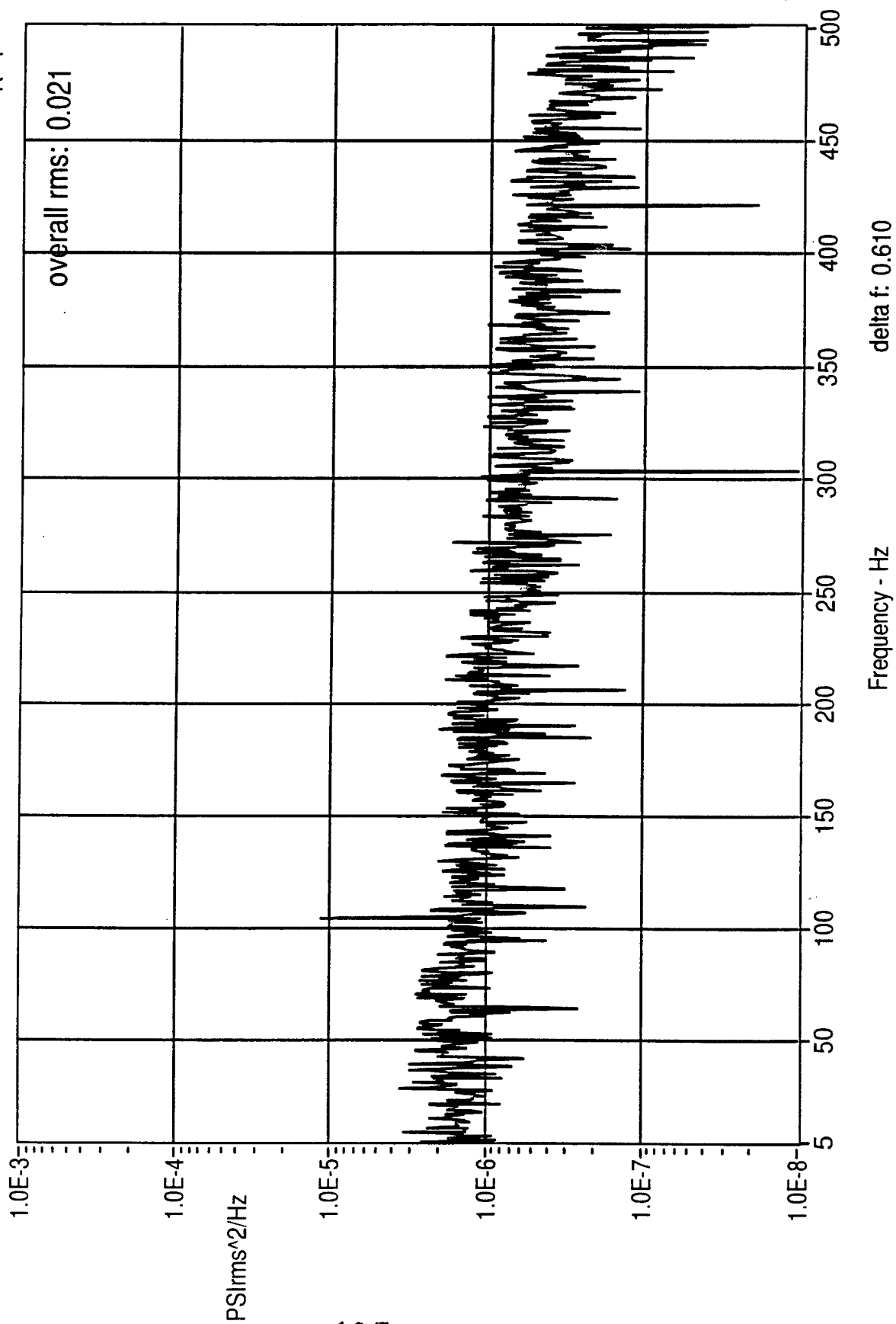
F-15 TPN\_3369: alpha=8 beta=-4 bp=45



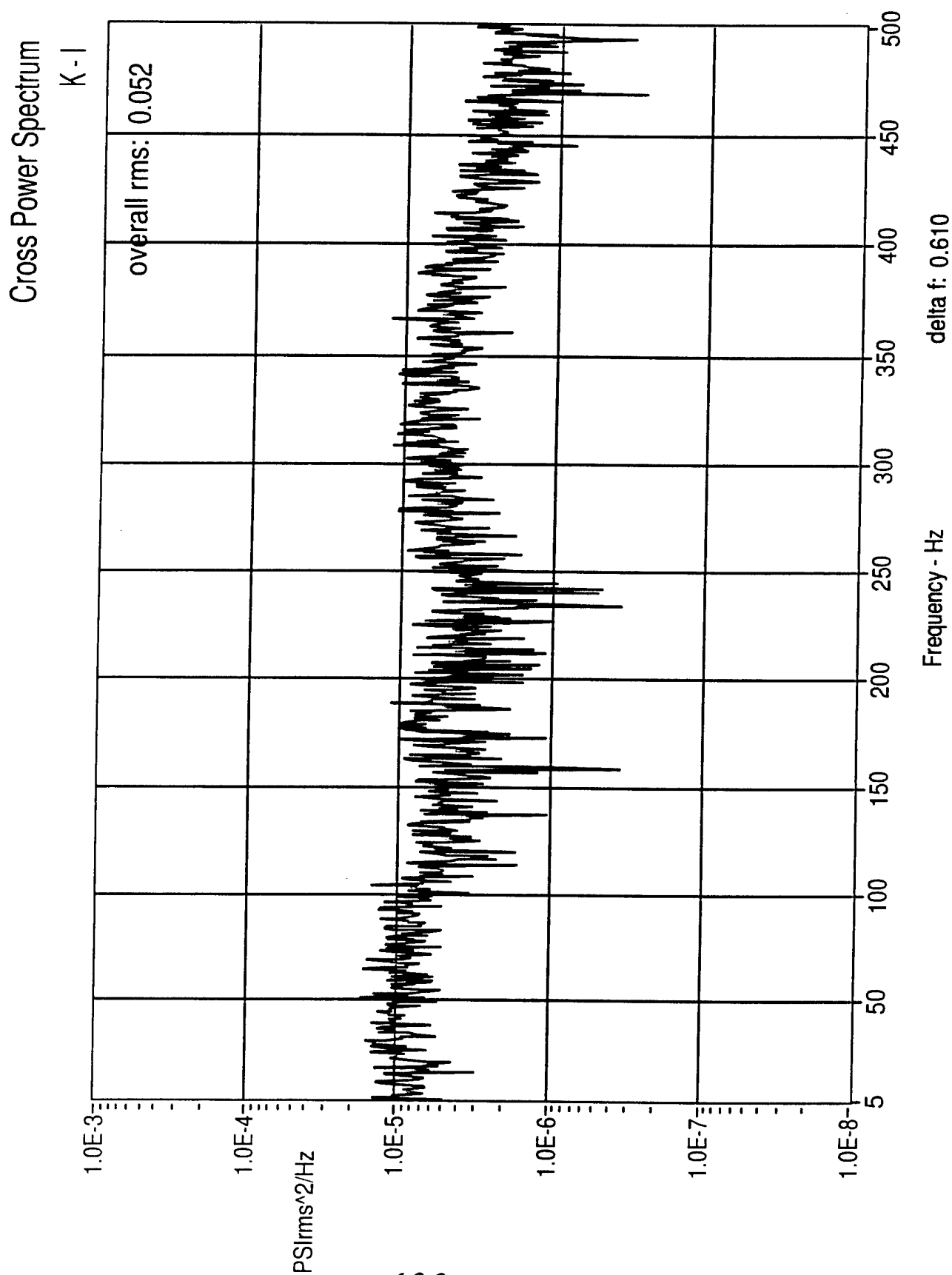
F-15 TPN\_3375: alpha=20 beta=-4 bp=45

# Cross Power Spectrum

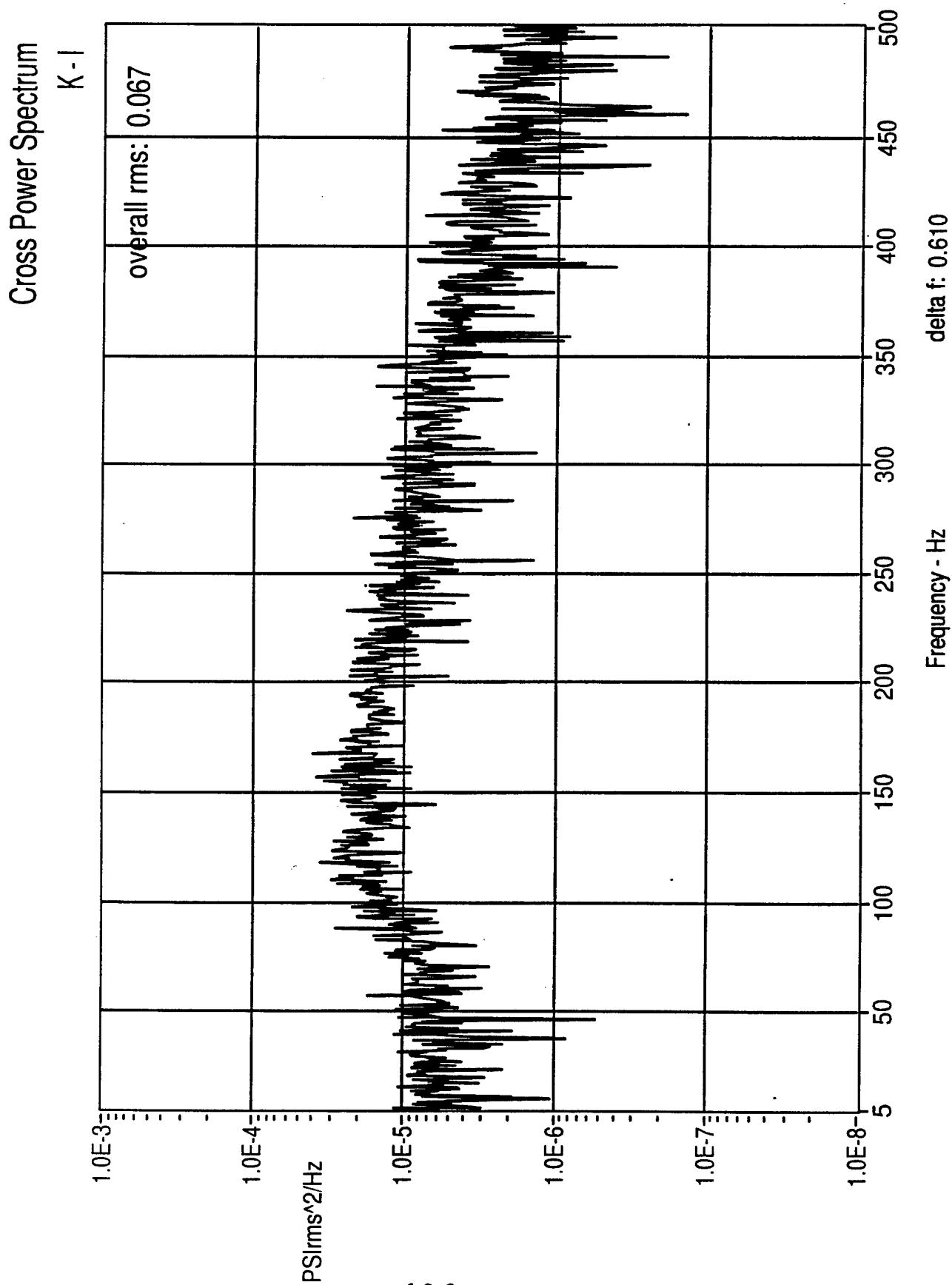
K - I



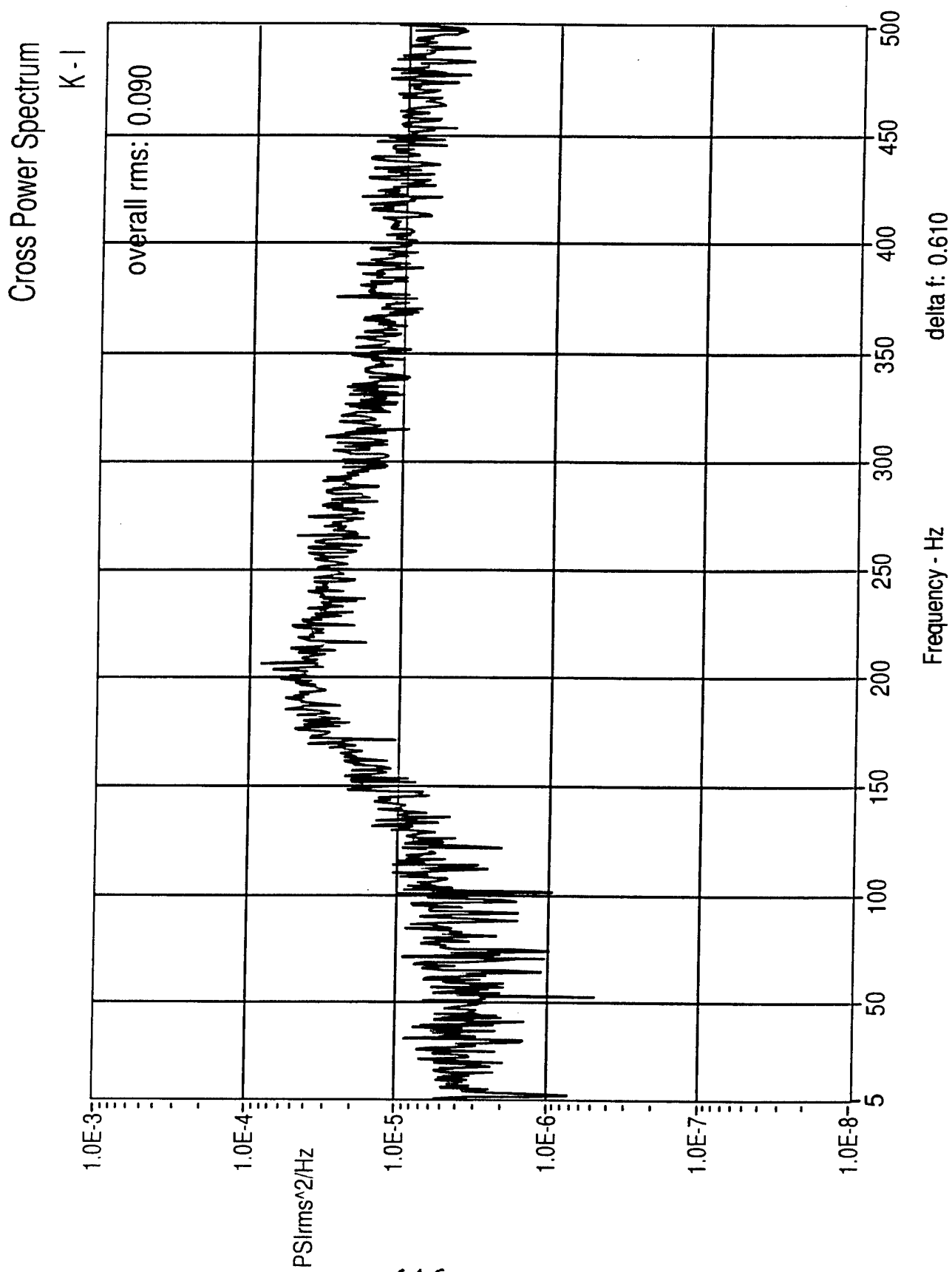
F-15 TPN\_3377: alpha=24 beta=-4 bp=46



F-15 TPN\_3379: alpha=32 beta=-4 bp=45



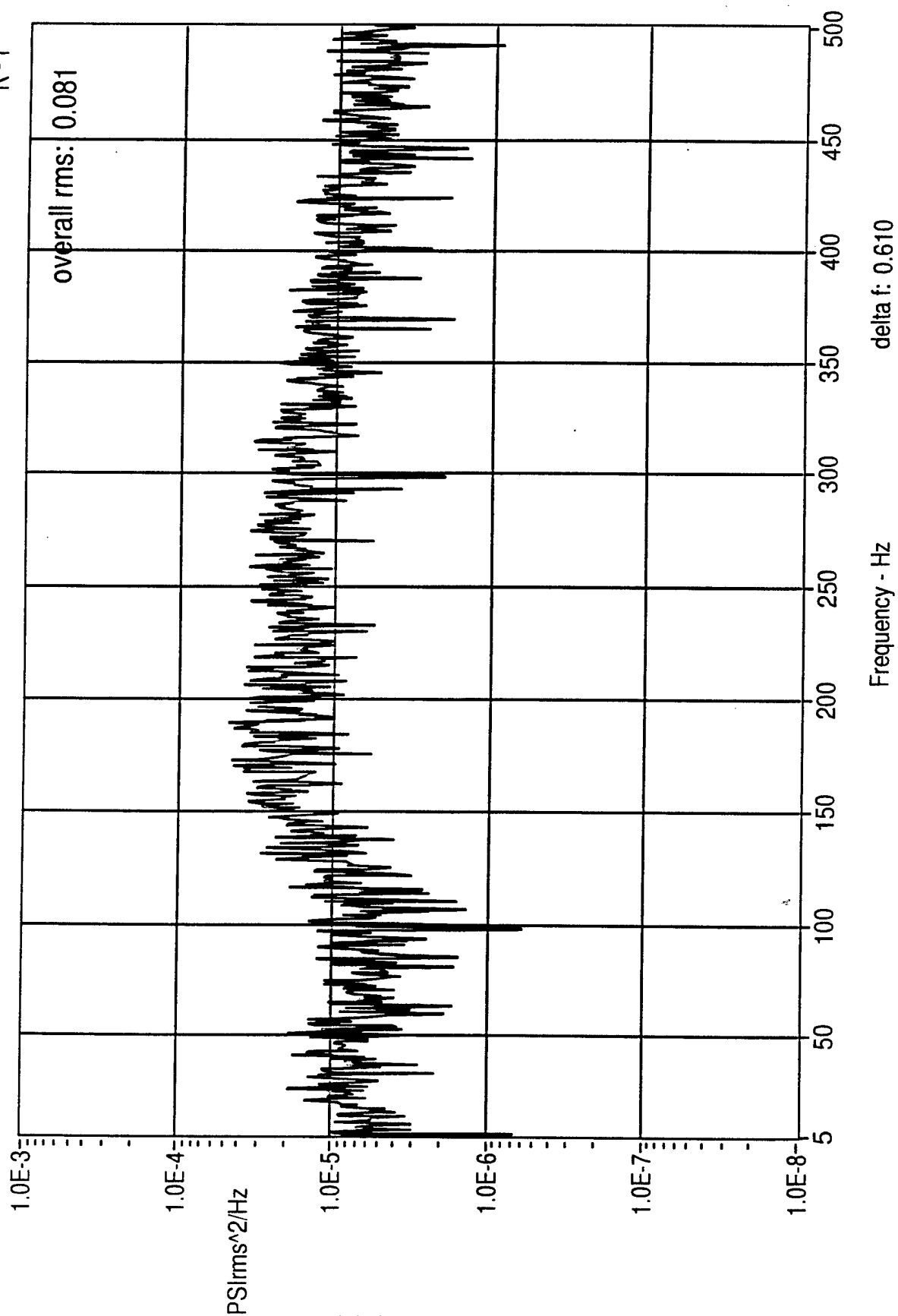
F-15 TPN\_3046: alpha=20 beta=4 bp=65



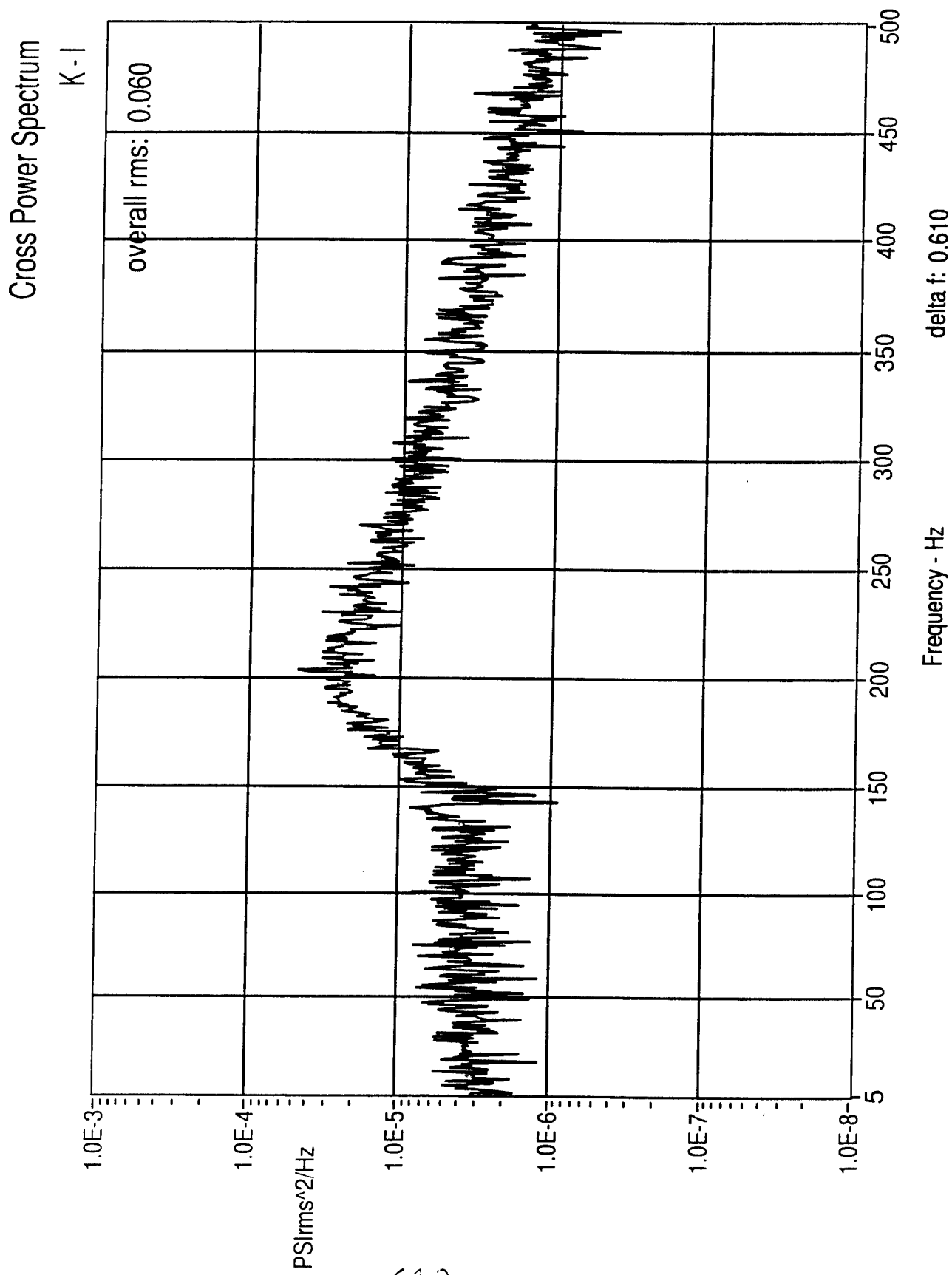
F-15 TPN\_3048: alpha=24 beta=4 bp=65

# Cross Power Spectrum

K - I

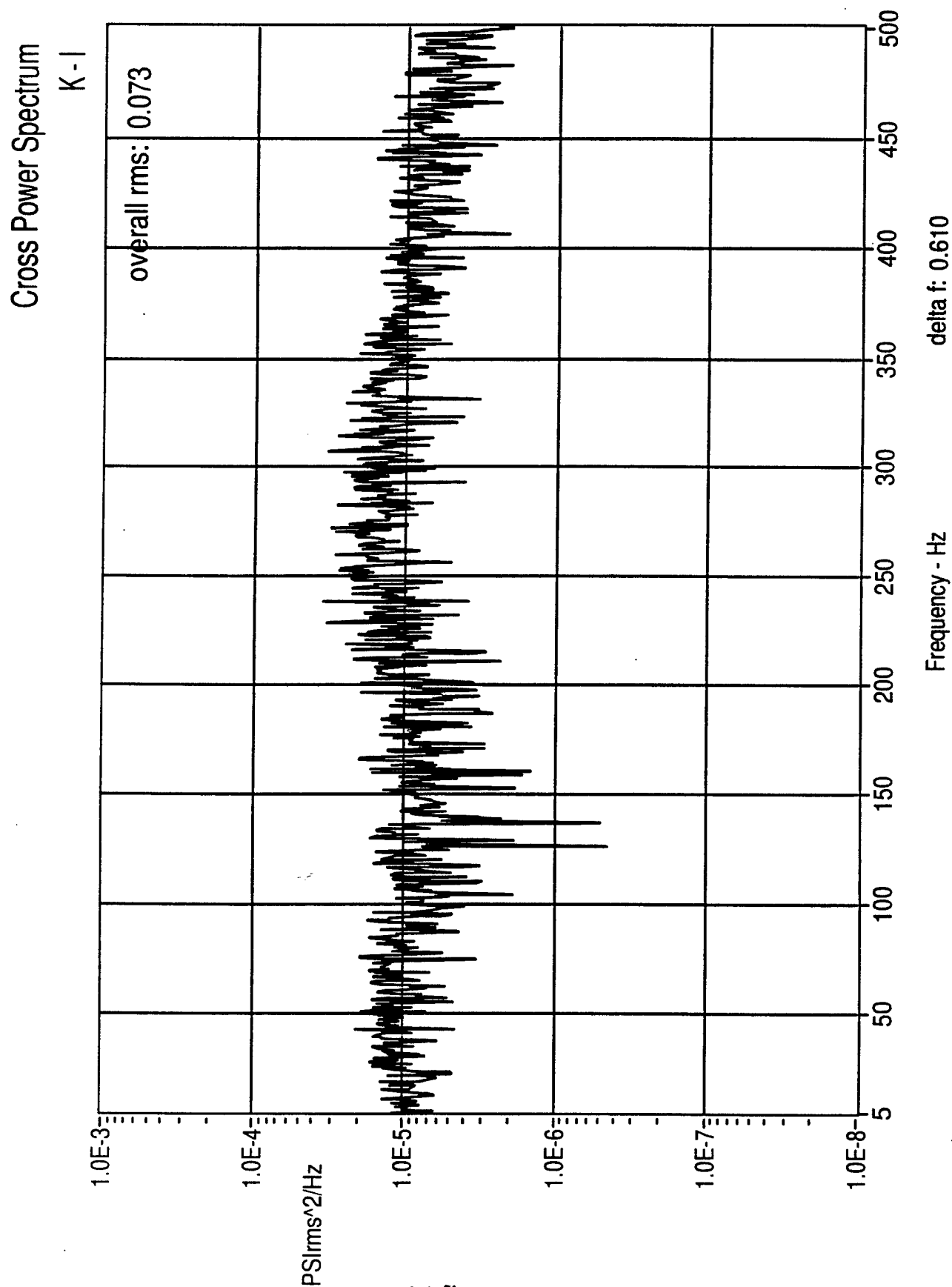


F-15 TPN\_3040: alpha=20 beta=0 bp=65

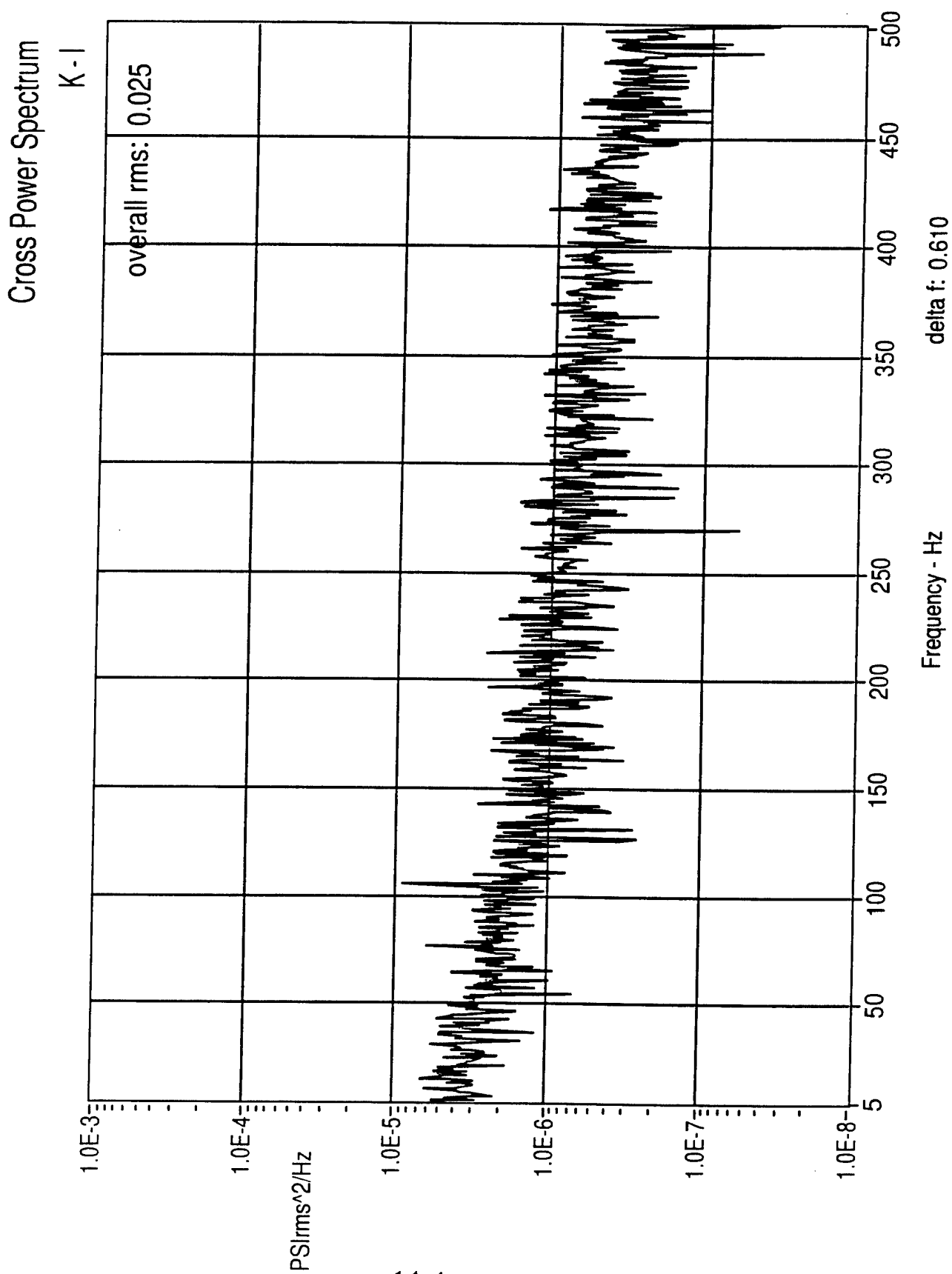




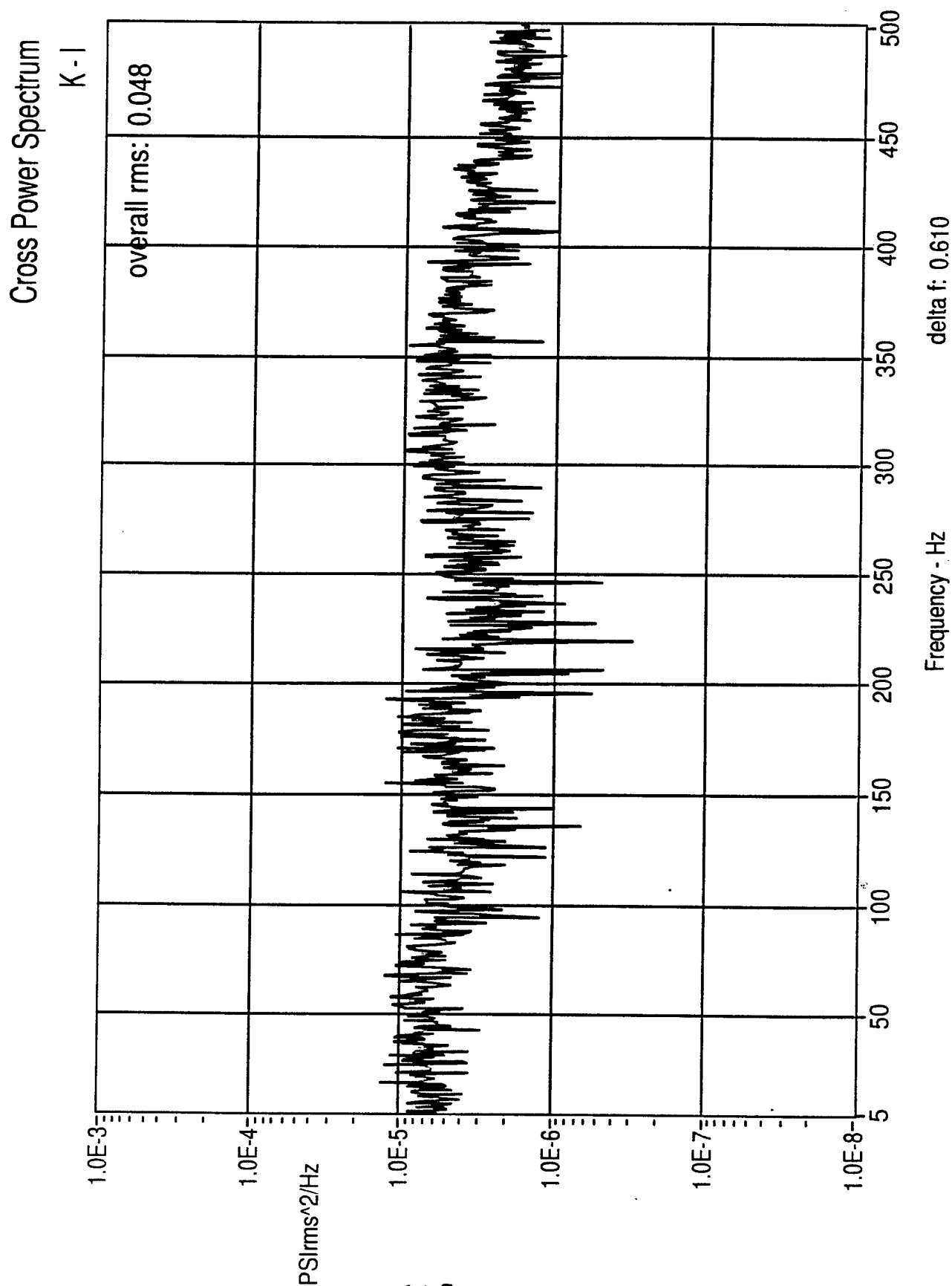
F-15 TPN\_3042: alpha=24 beta=0 bp=65



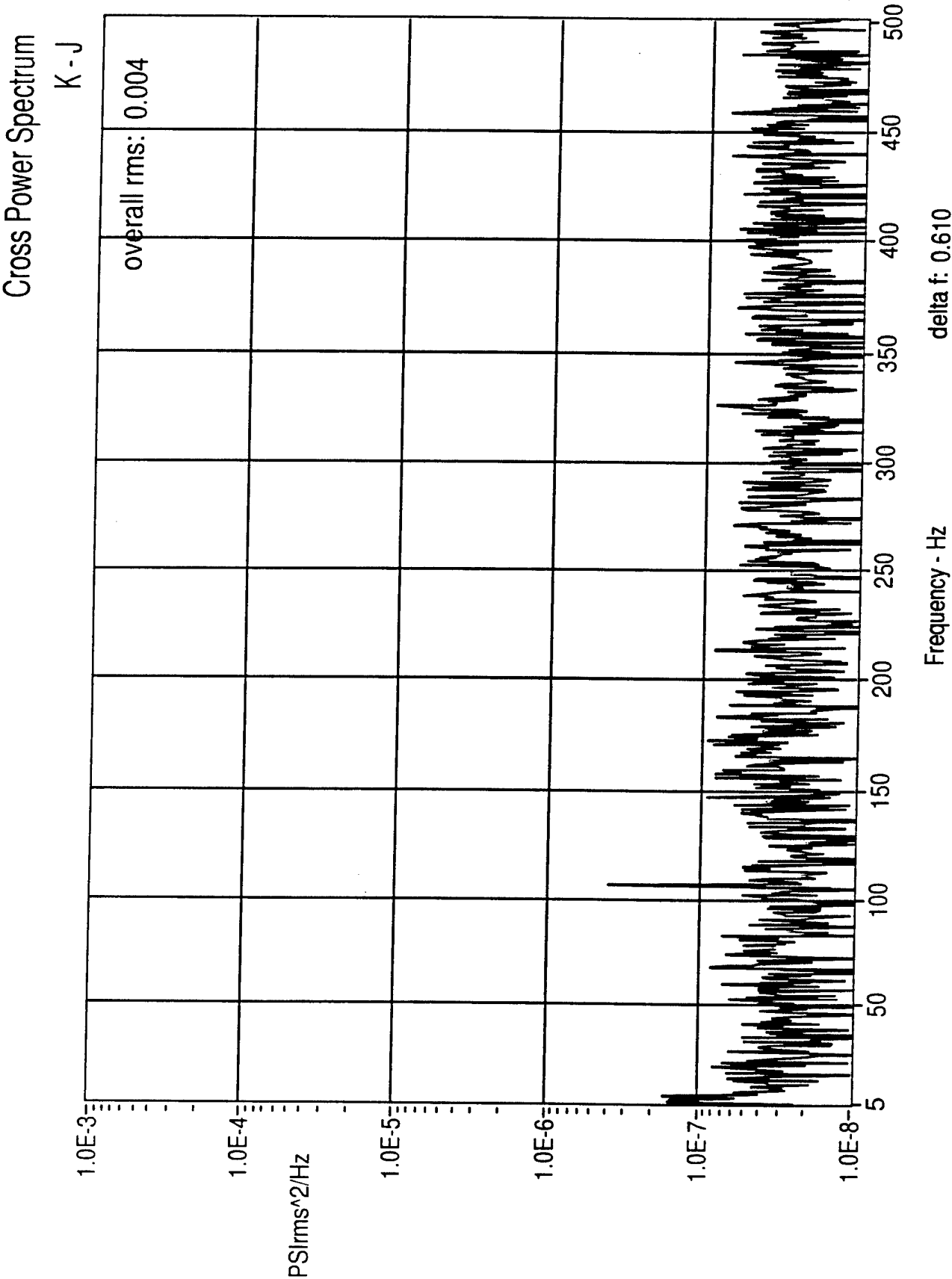
F-15 TPN\_3034: alpha=20 beta=-4 bp=6t



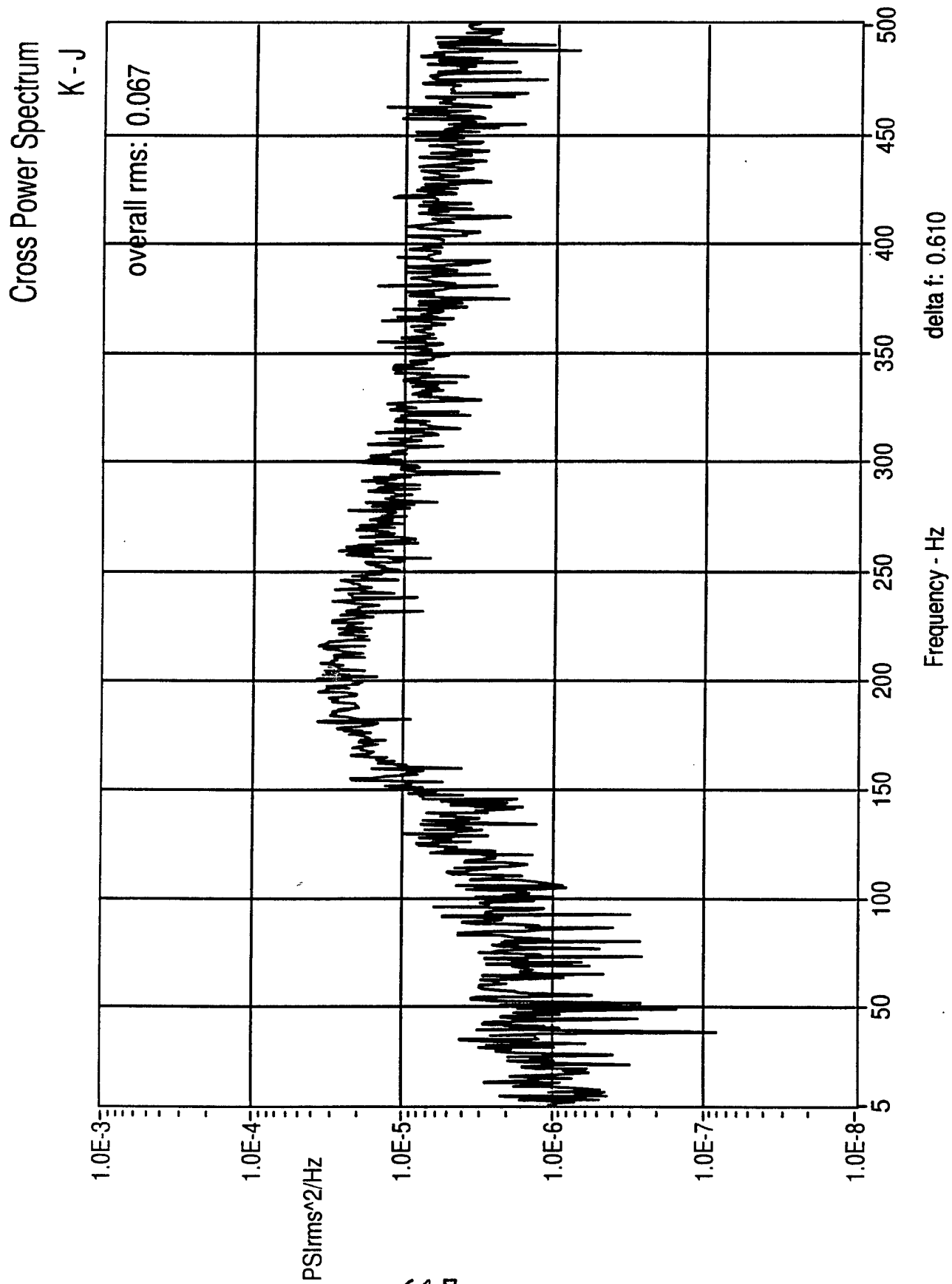
F-15 TPN\_3036: alpha=24 beta=-4 bp=65



F-15 TPN\_2918: alpha=8 beta=4 bp=0



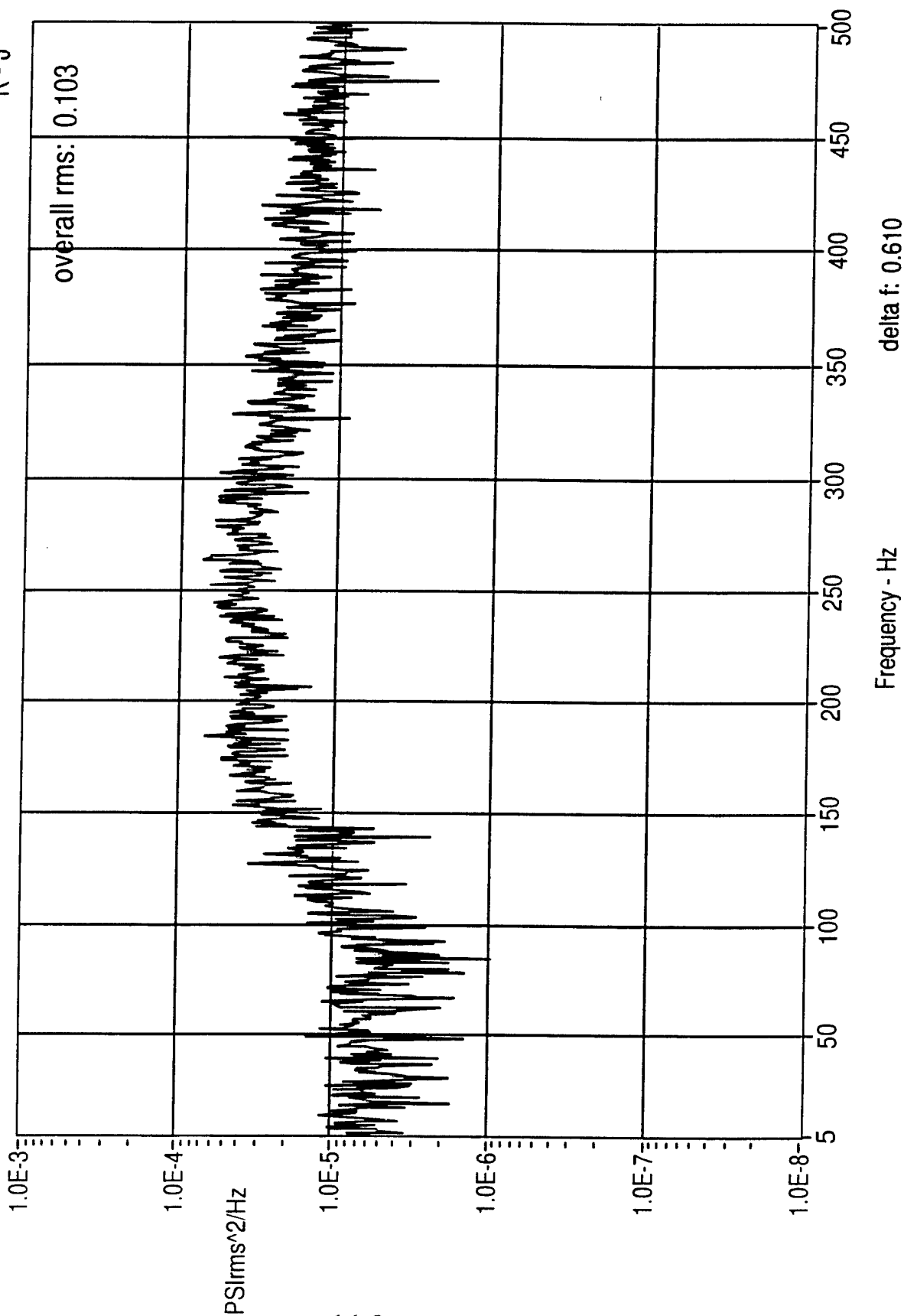
F-15 TPN\_2924: alpha=20 beta=4 bp=0



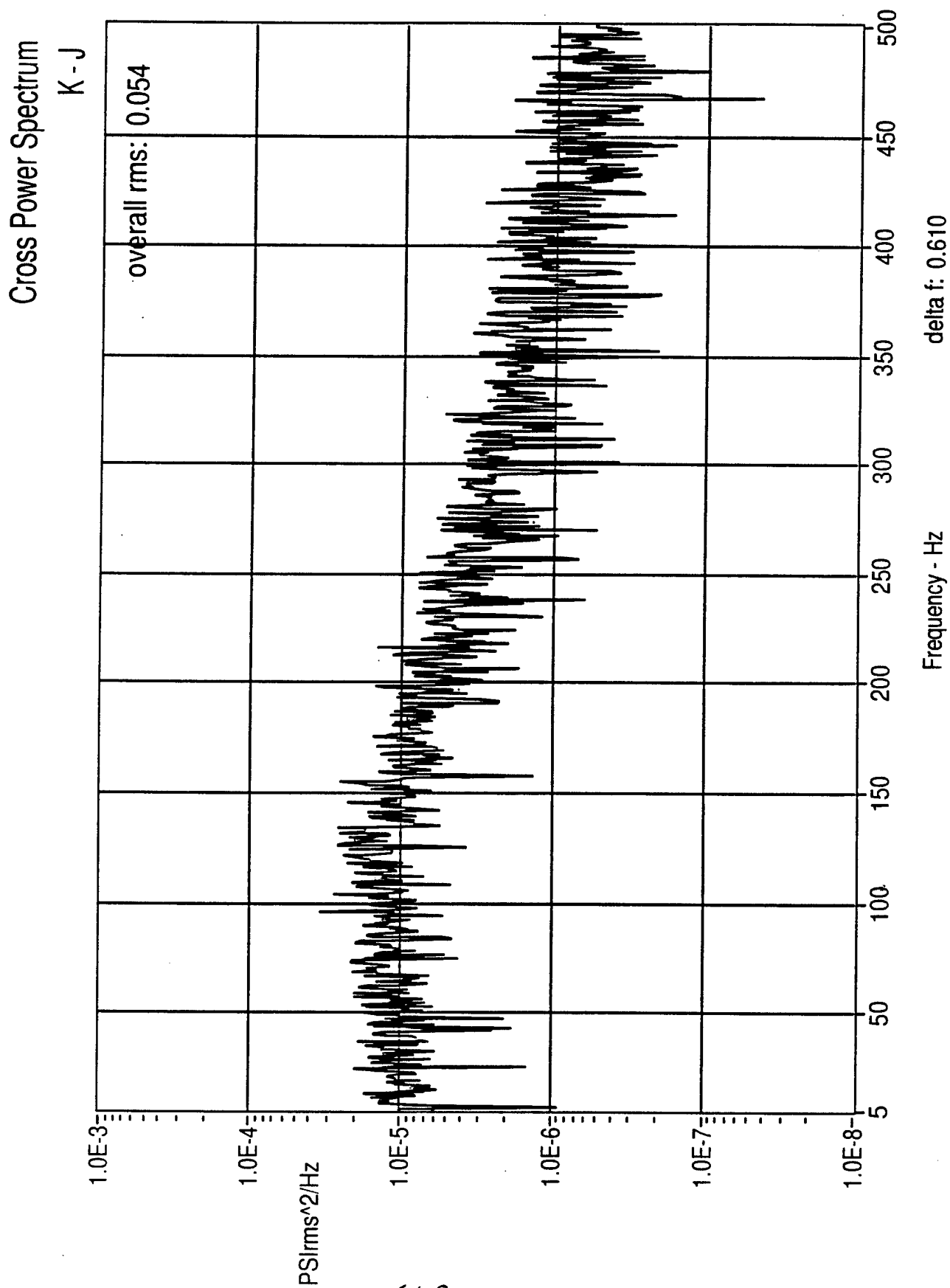
F-15 TPN\_2926: alpha=24 beta=4 bp=0

# Cross Power Spectrum

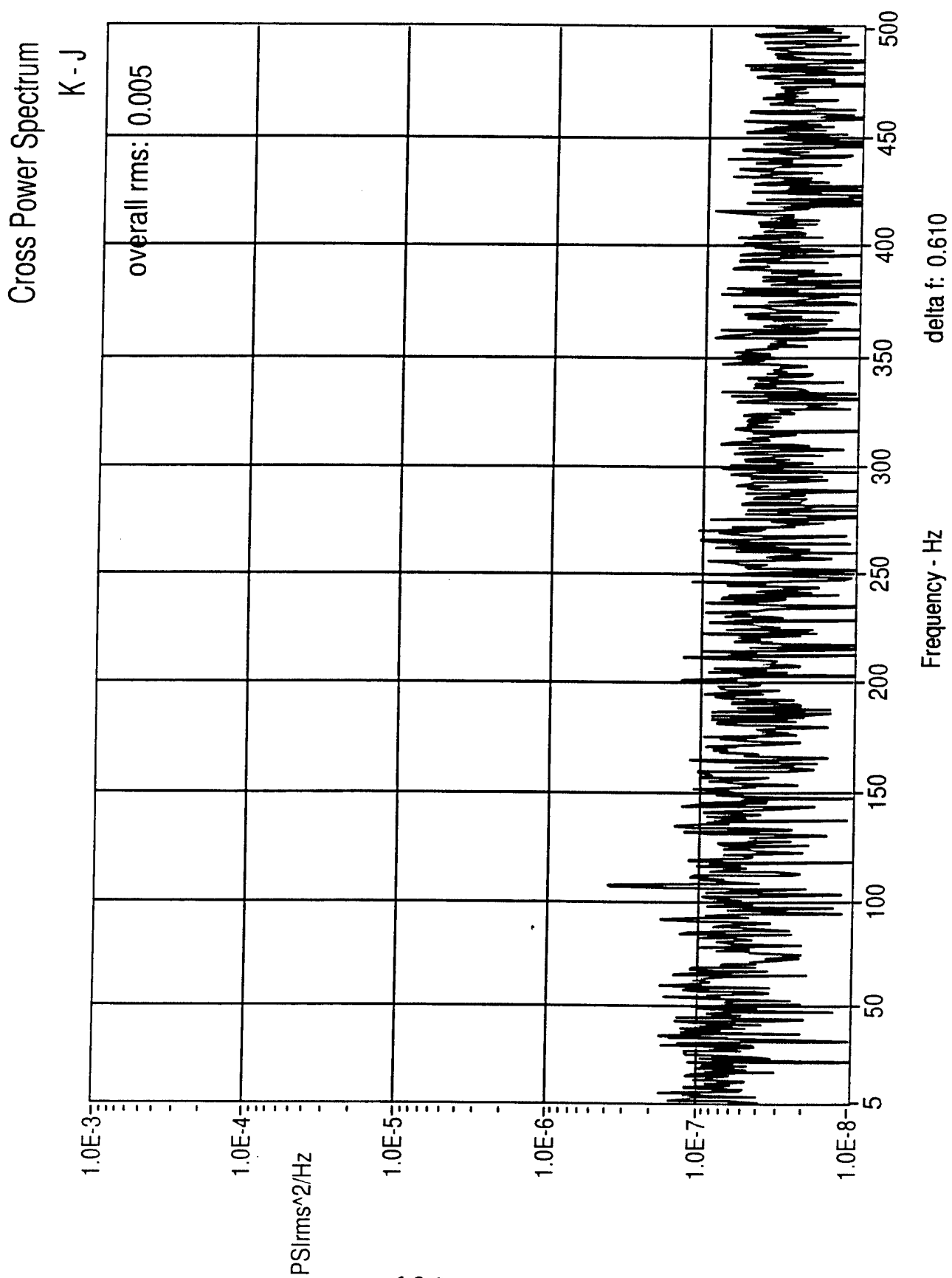
K - J



F-15 TPN\_2928: alpha=32 beta=4 bp=0

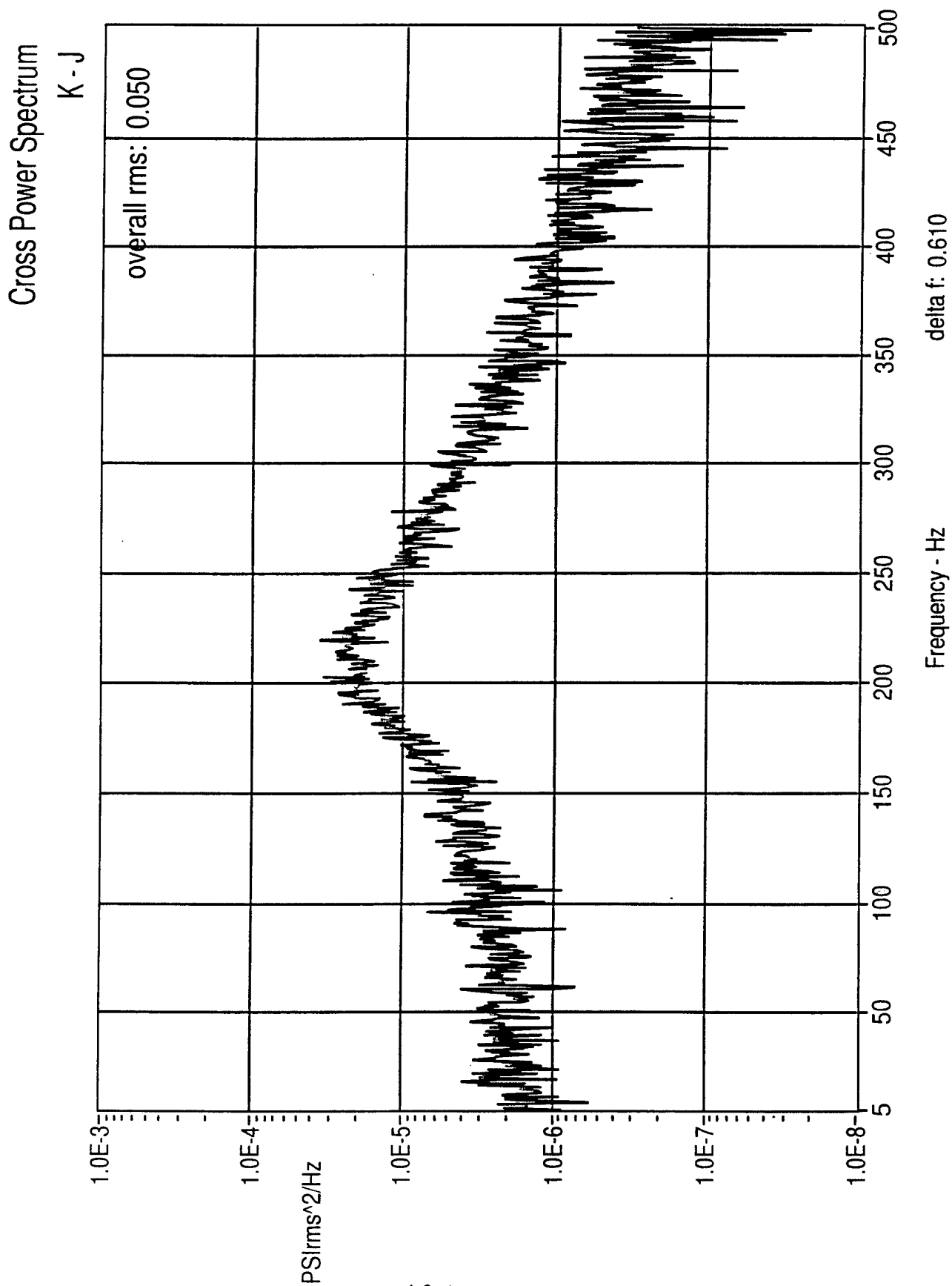


F-15 TPN\_2844: alpha=8 beta=0 bp=0





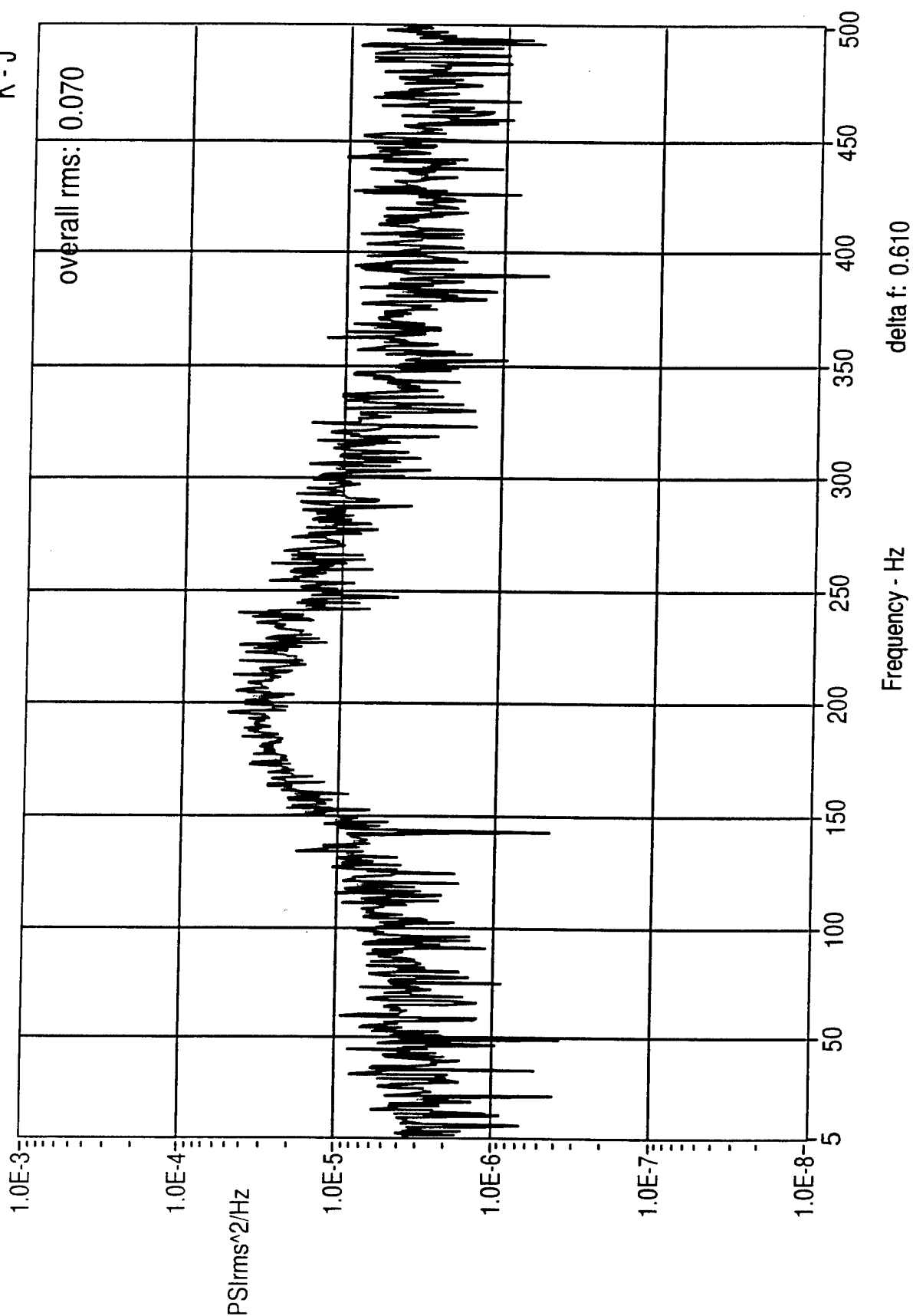
F-15 TPN\_2850: alpha=20 beta=0 bp=0



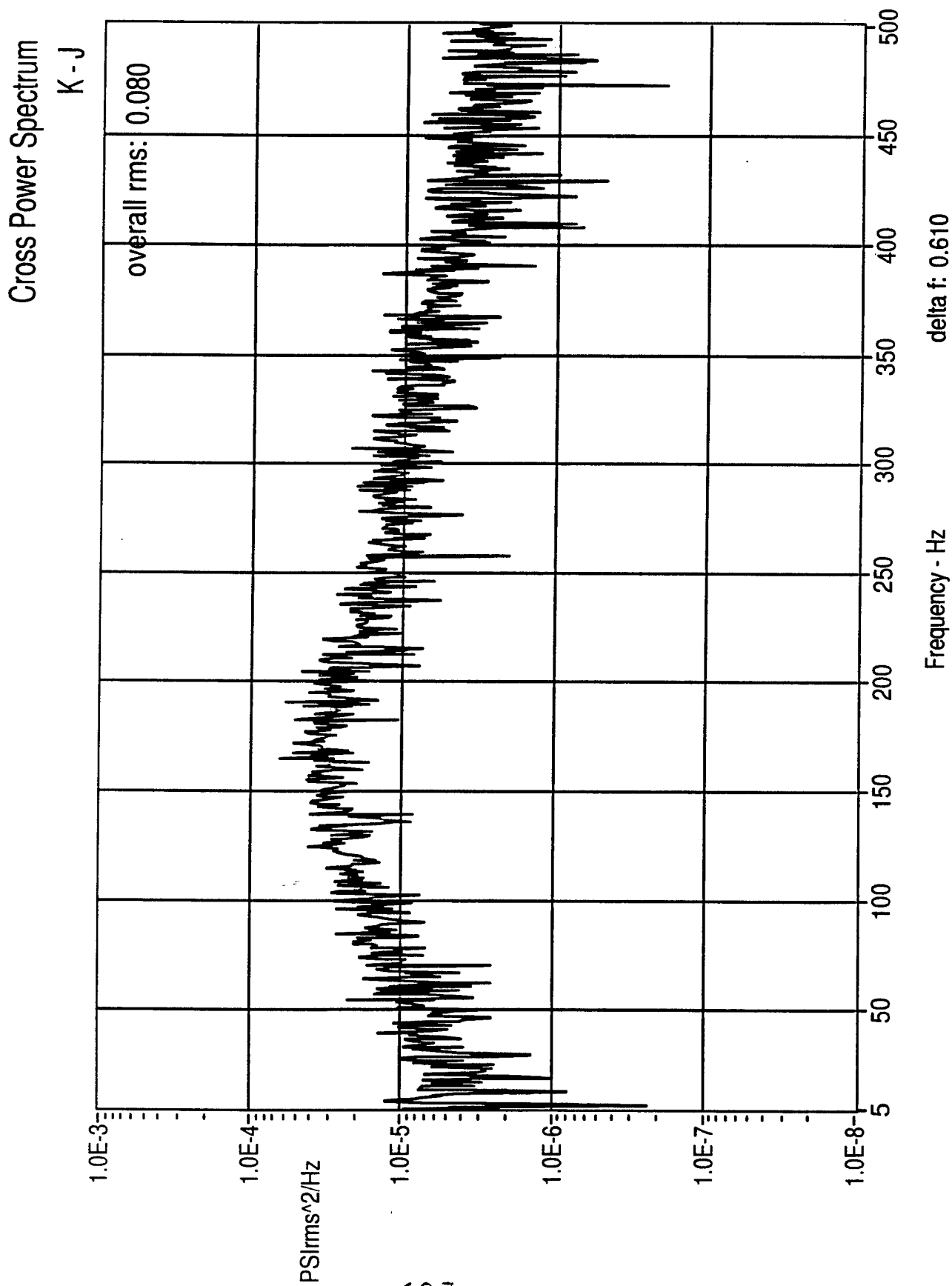
F-15 TPN\_2852: alpha=24 beta=0 bp=0

# Cross Power Spectrum

K - J



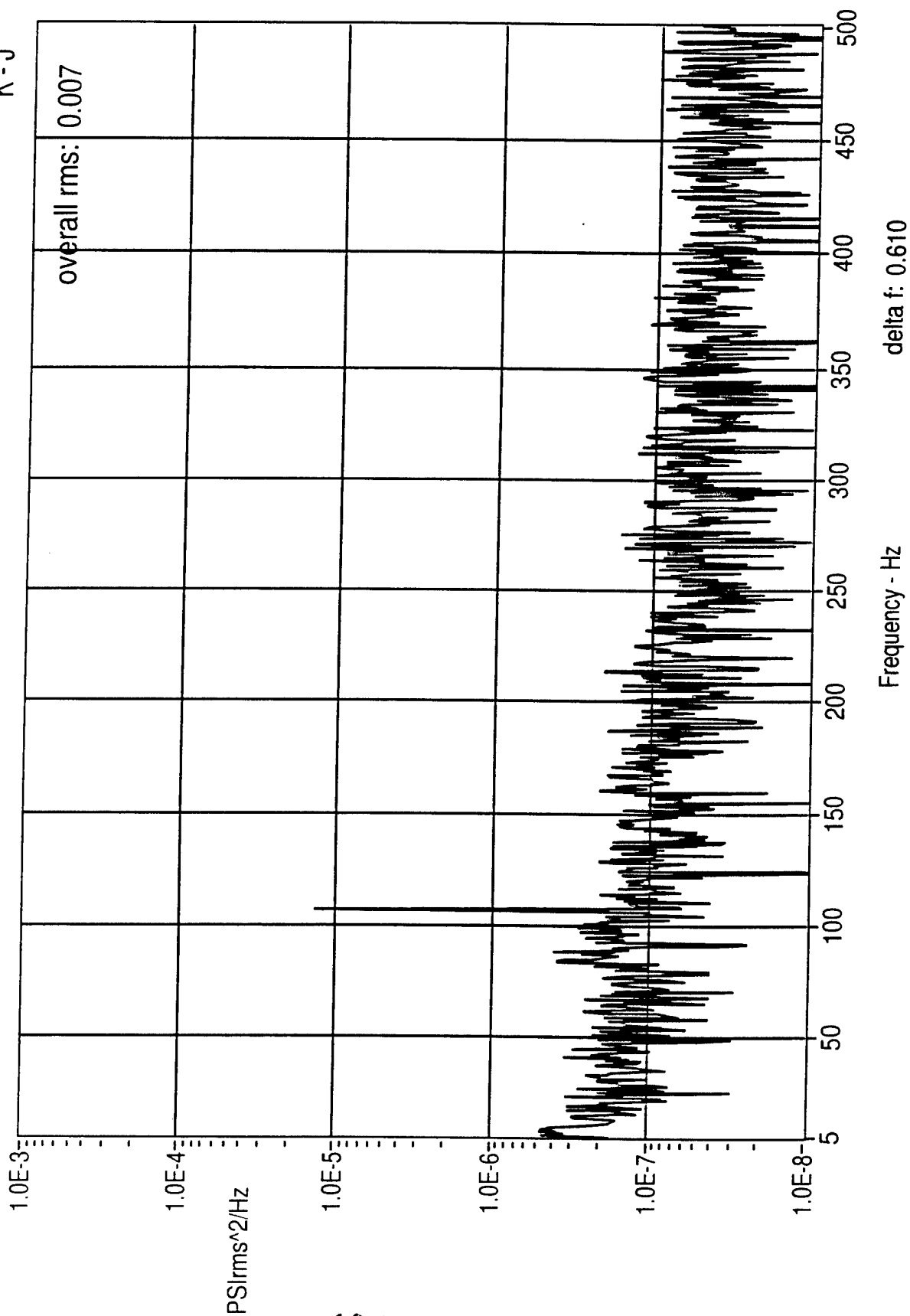
F-15 TPN\_2854: alpha=32 beta=0 bp=0



F-15 TPN\_2864: alpha=8 beta=-4 bp=0

# Cross Power Spectrum

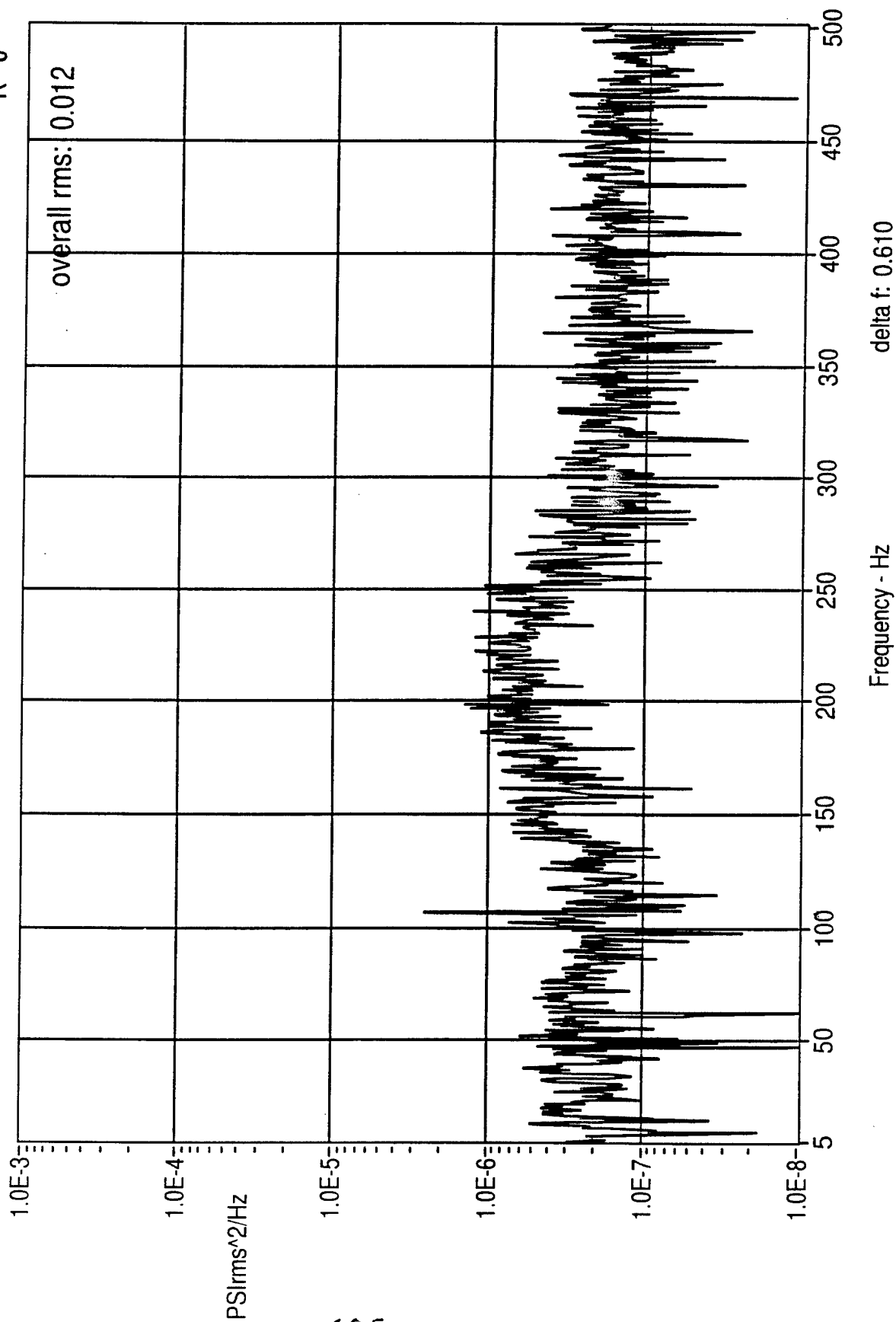
K-J



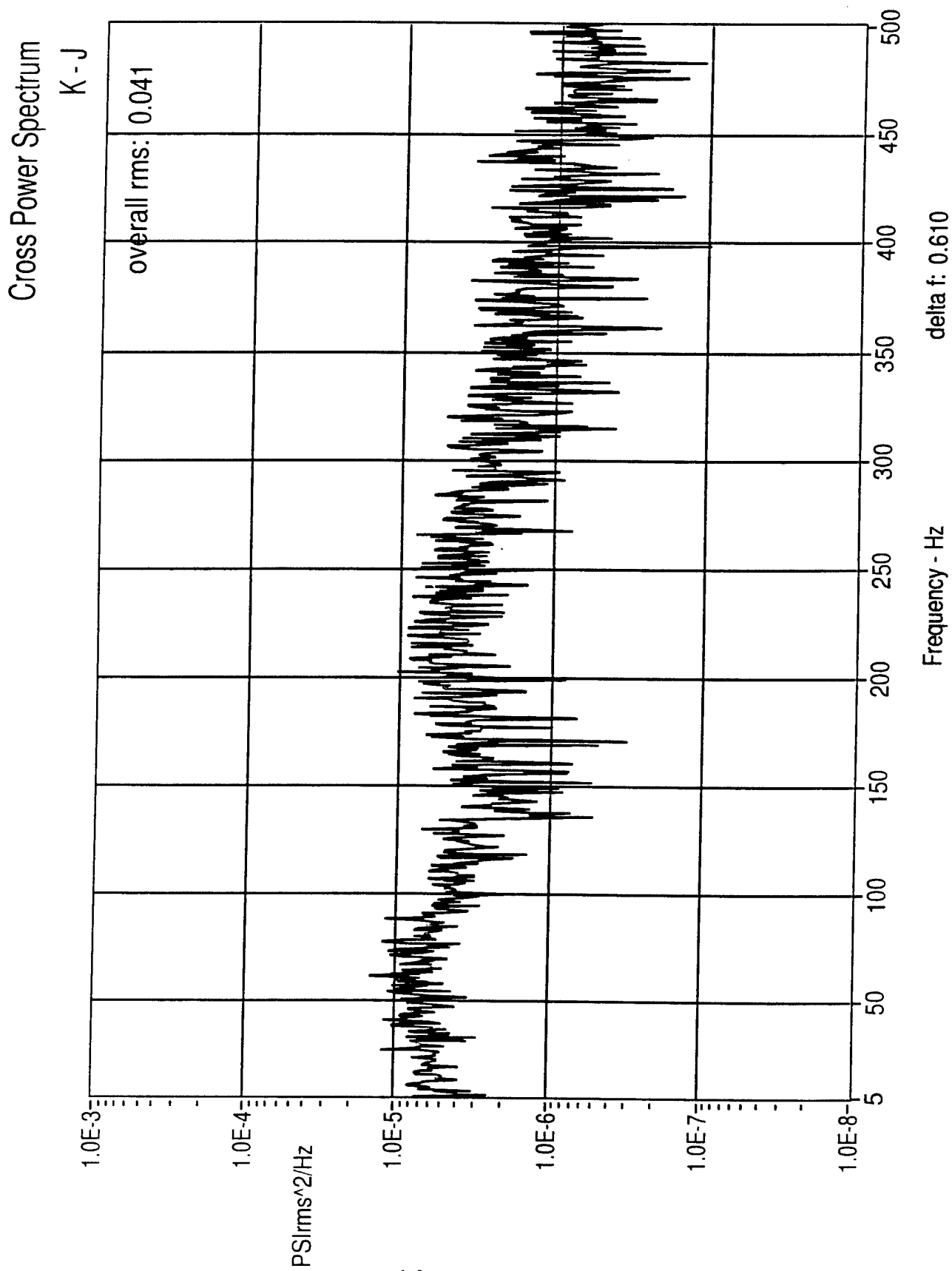
F-15 TPN\_2870: alpha=20 beta=-4 bp=0

# Cross Power Spectrum

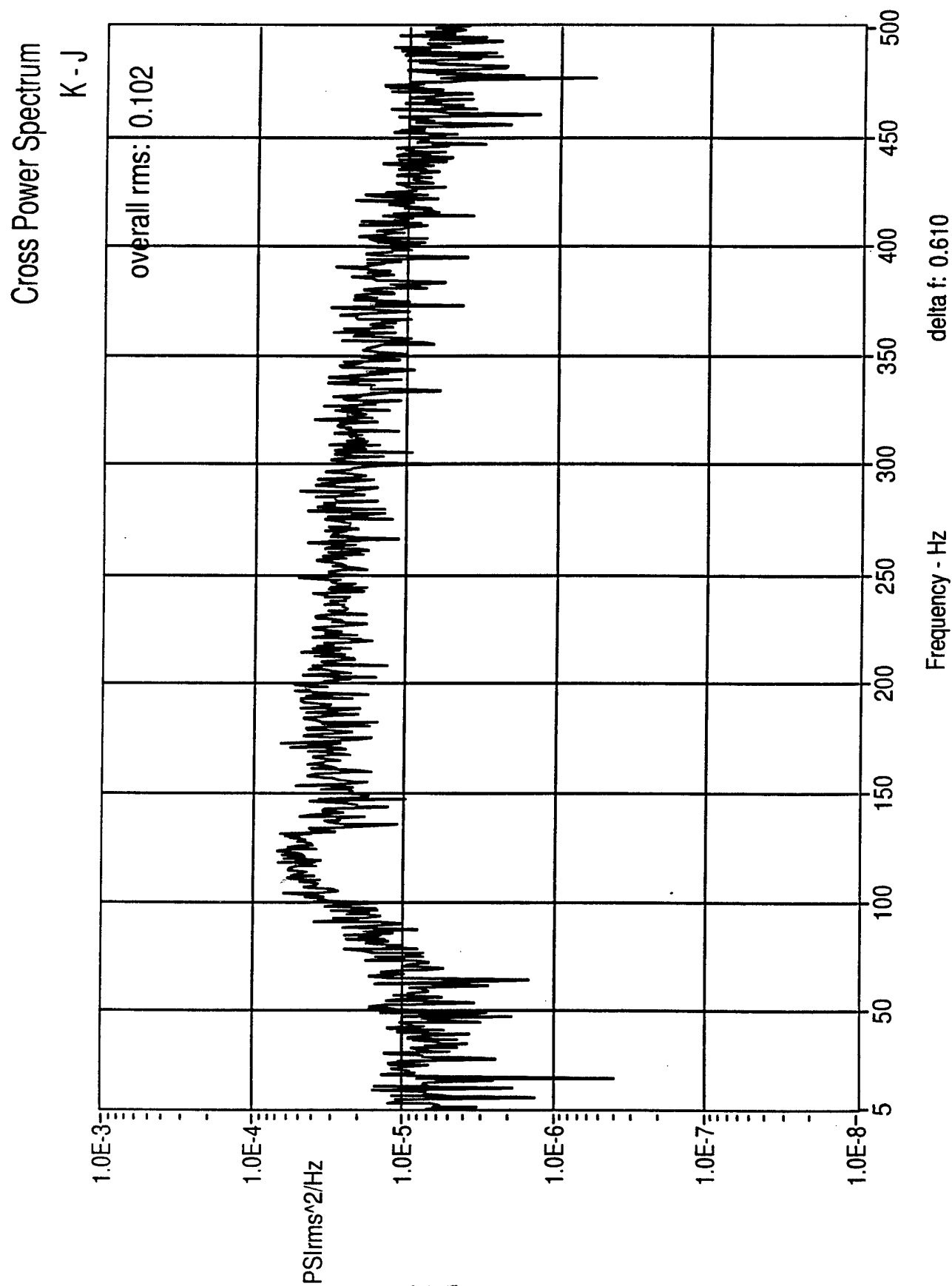
K - J



F-15 TPN\_2872: alpha=24 beta=-4 bp=0



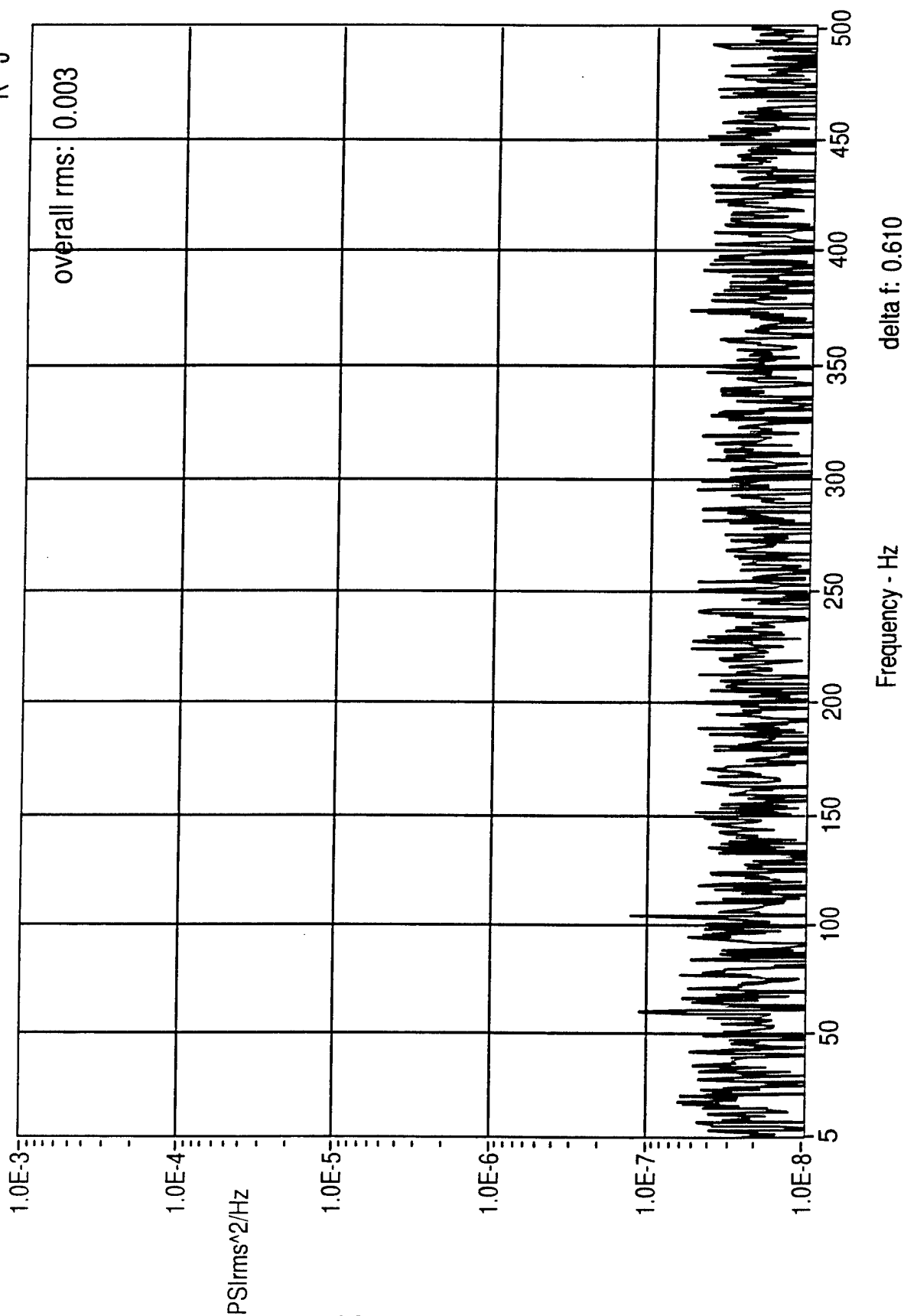
F-15 TPN\_2874: alpha=32 beta=-4 bp=0



F-15 TPN\_3351: alpha=8 beta=4 bp=45

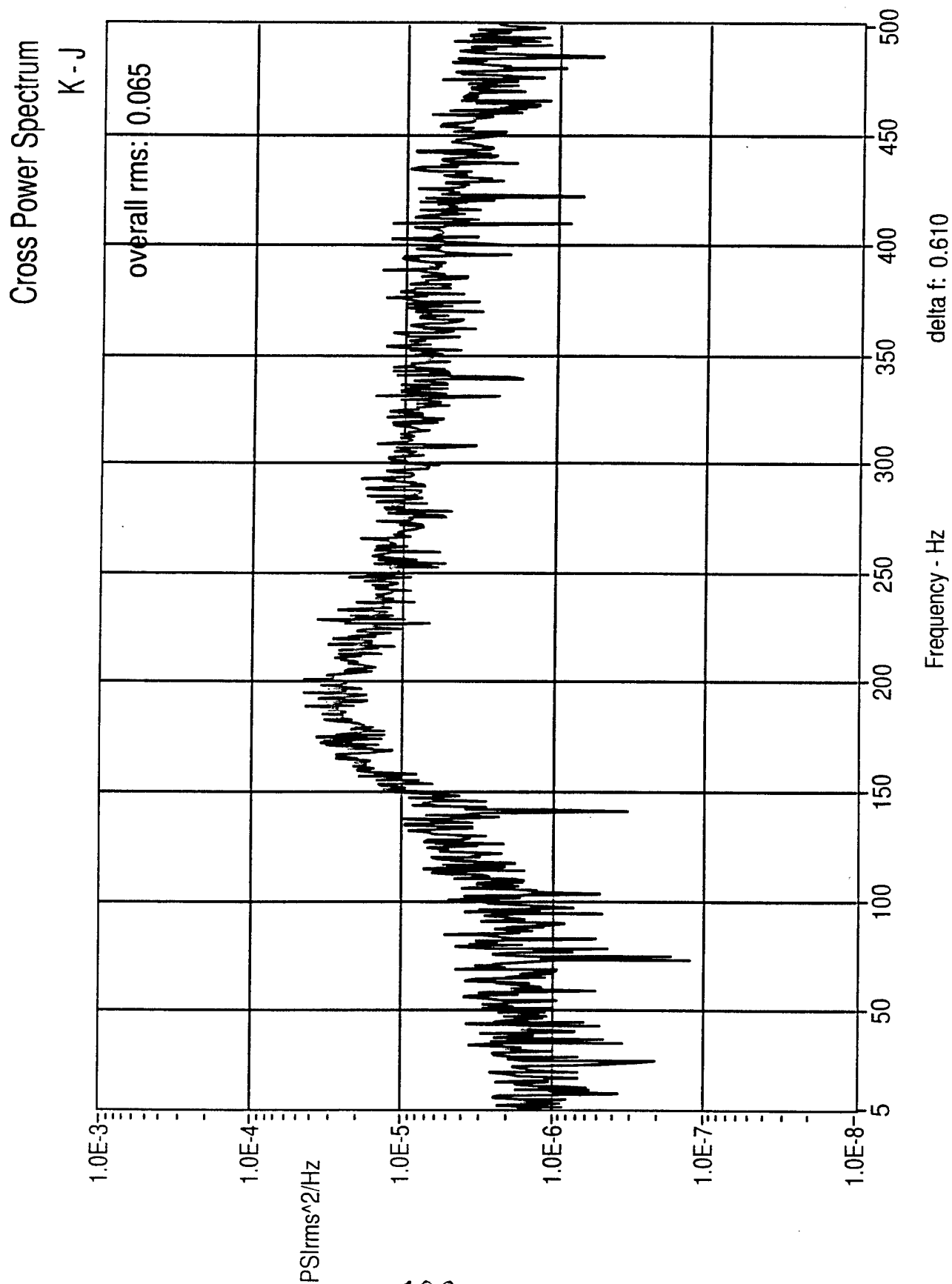
# Cross Power Spectrum

K-J





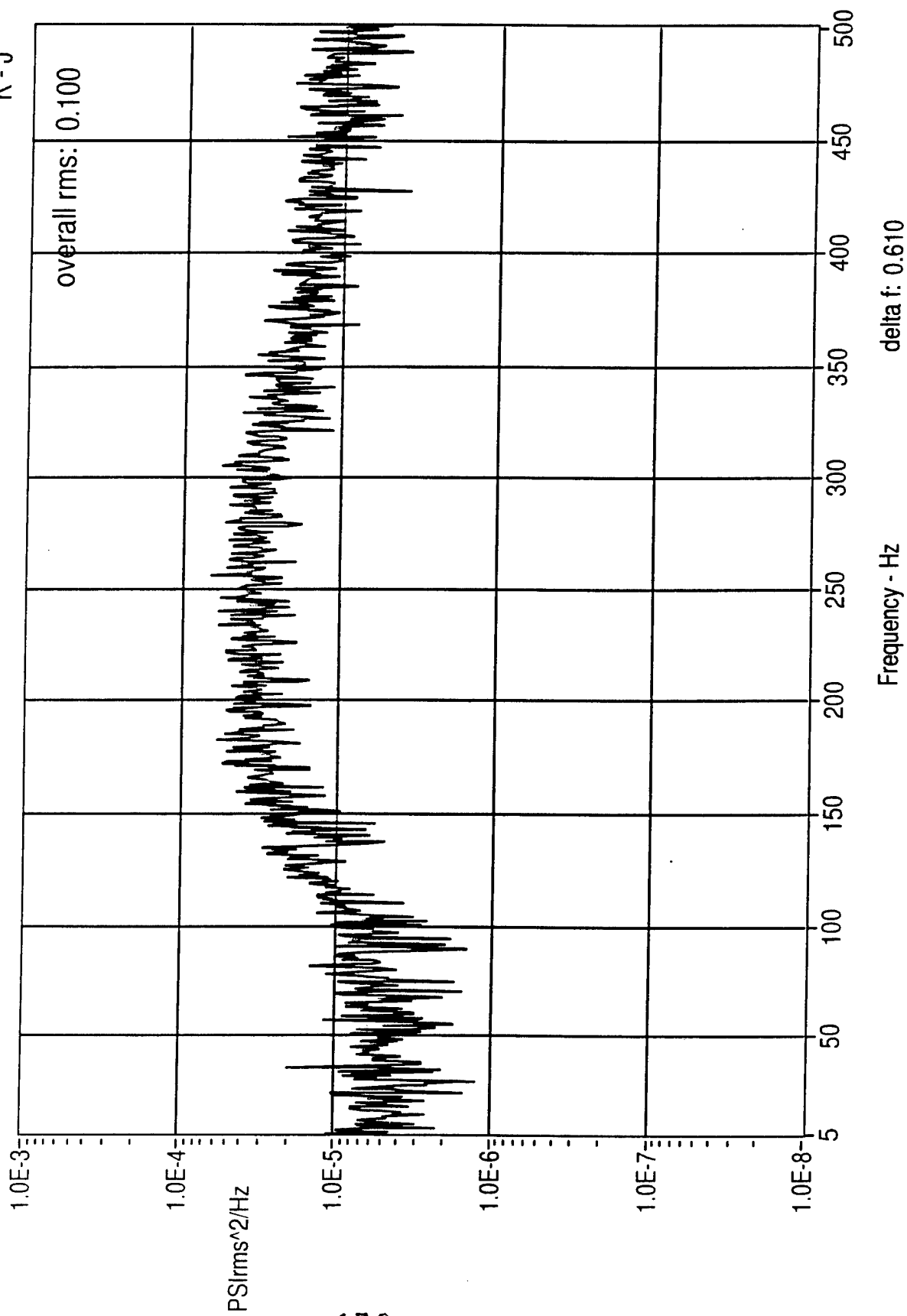
F-15 TPN\_3357: alpha=20 beta=4 bp=45



F-15 TPN\_3359: alpha=24 beta=4 bp=45

# Cross Power Spectrum

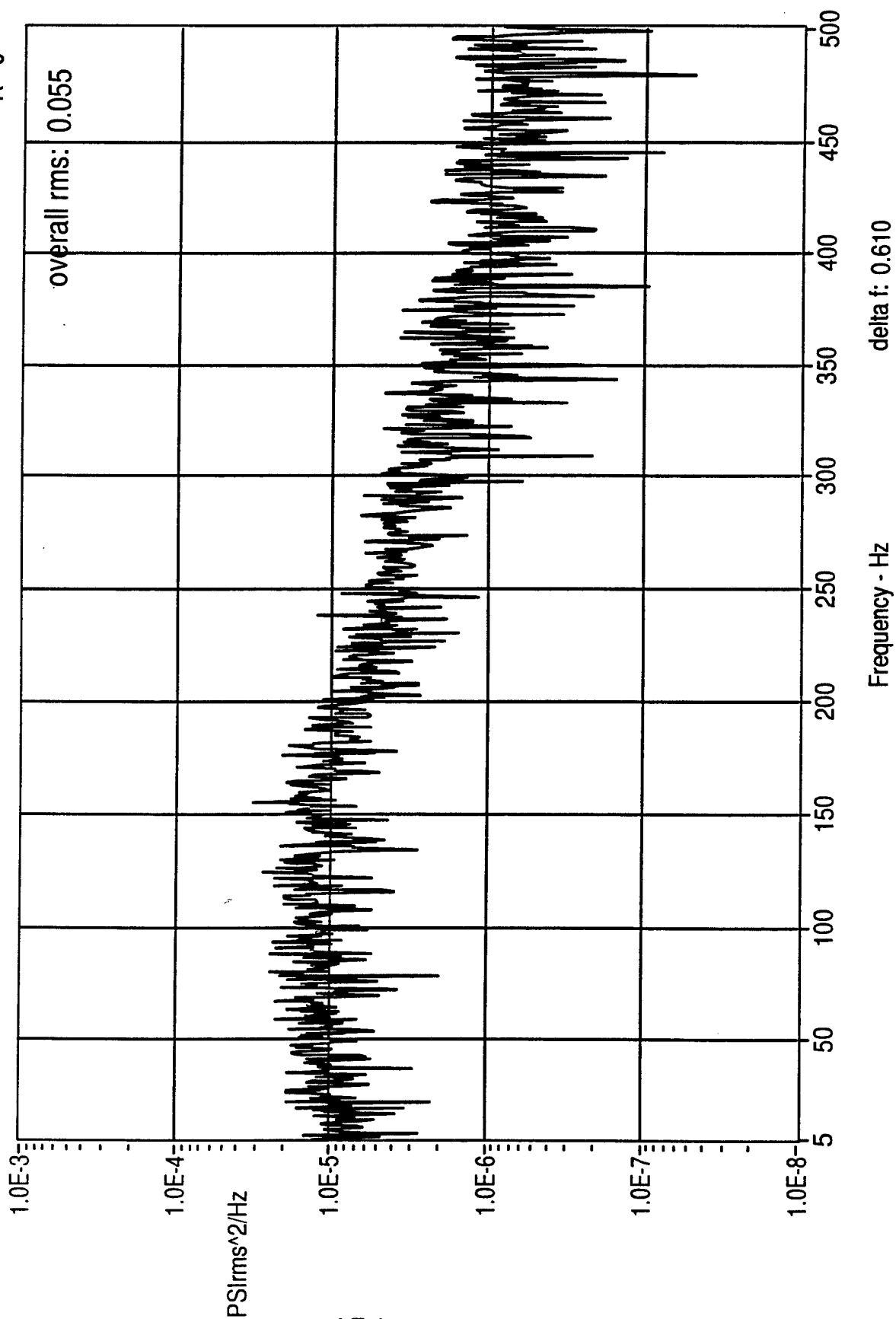
K - J



F-15 TPN\_3361: alpha=32 beta=4 bp=45

# Cross Power Spectrum

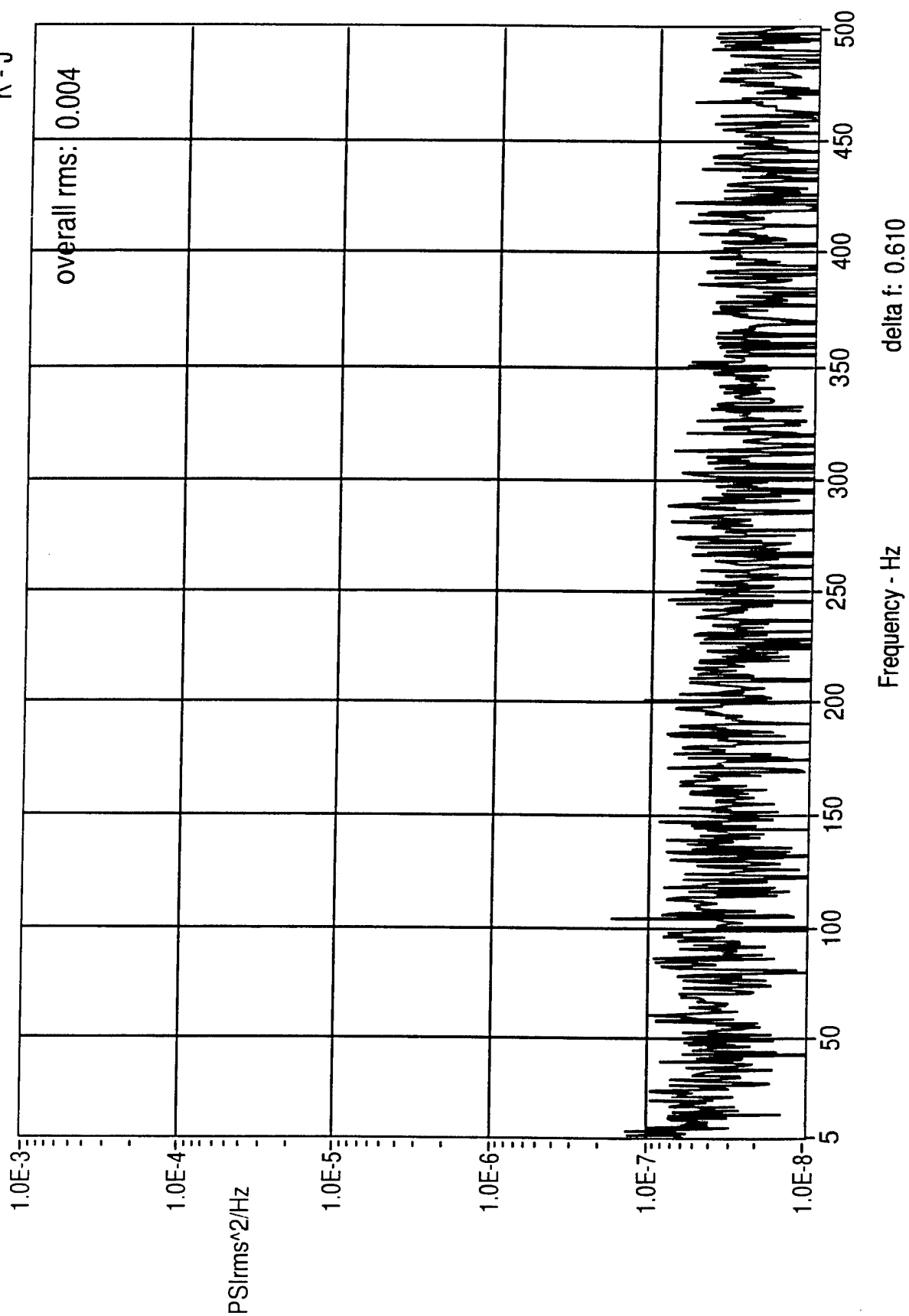
K - J



F-15 TPN\_3333: alpha=8 beta=0 bp=45

# Cross Power Spectrum

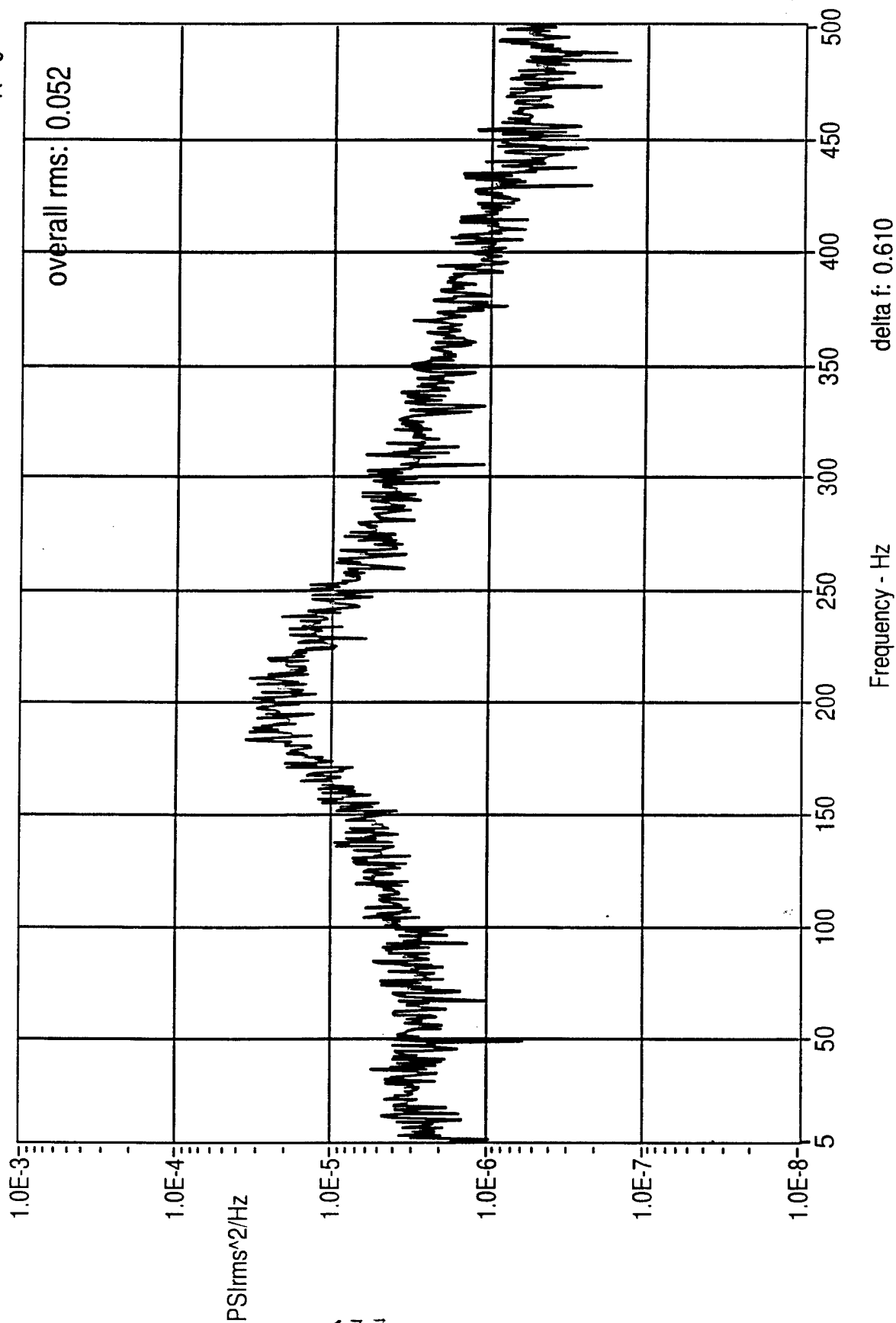
K - J



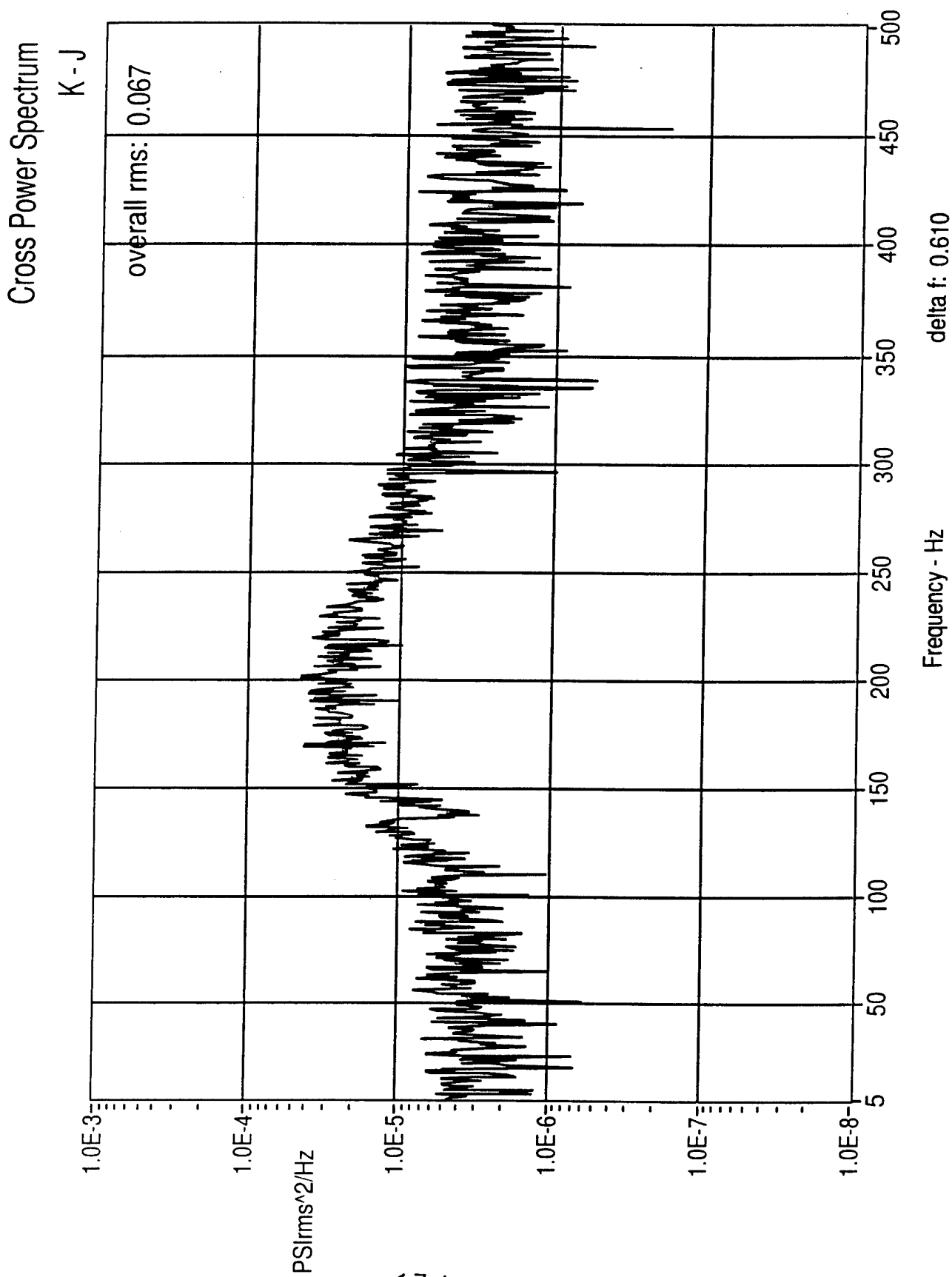
F-15 TPN\_3339: alpha=20 beta=0 bp=45

# Cross Power Spectrum

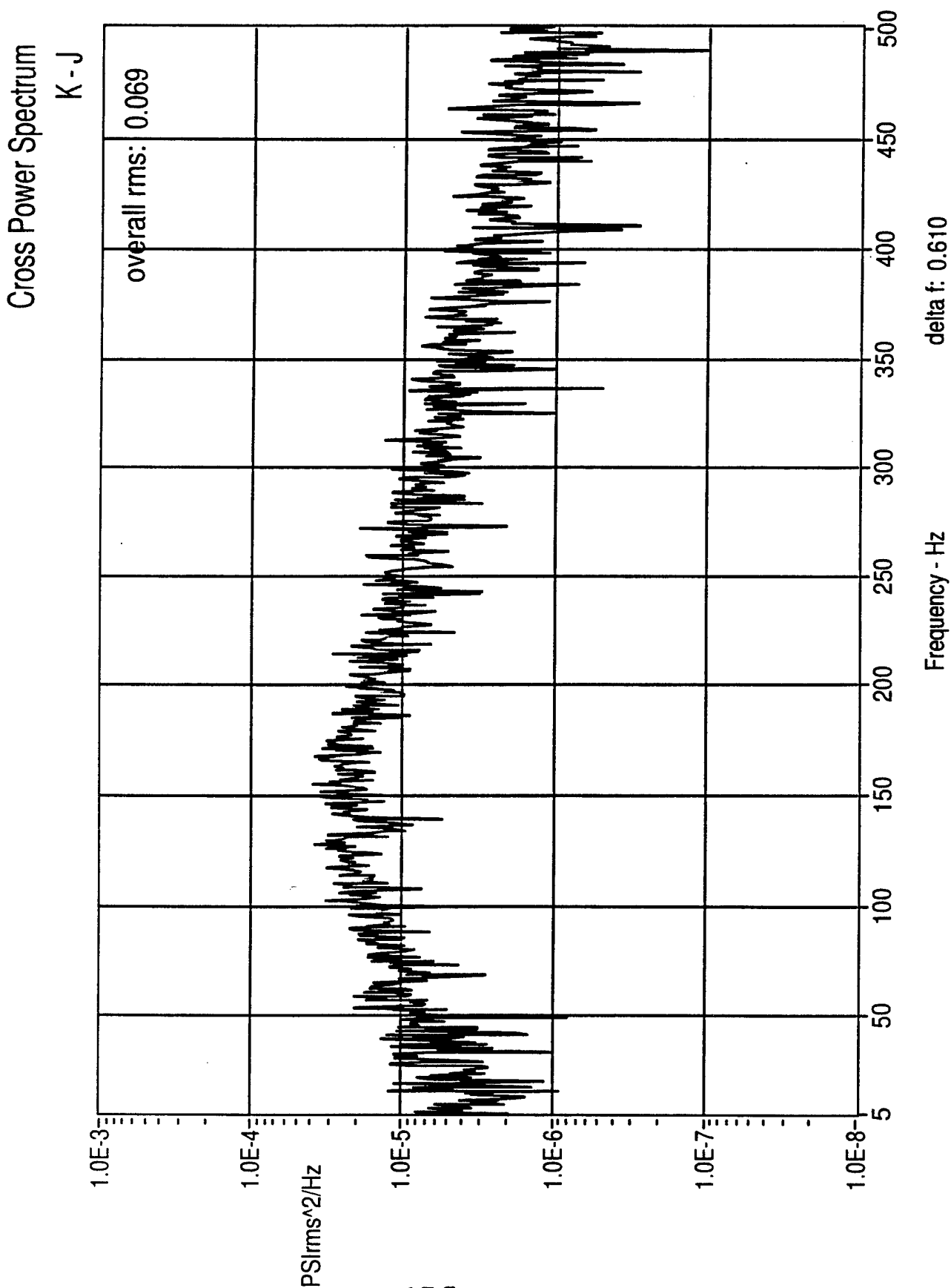
K - J



F-15 TPN\_3341:alpha=24 beta=0 bp=45



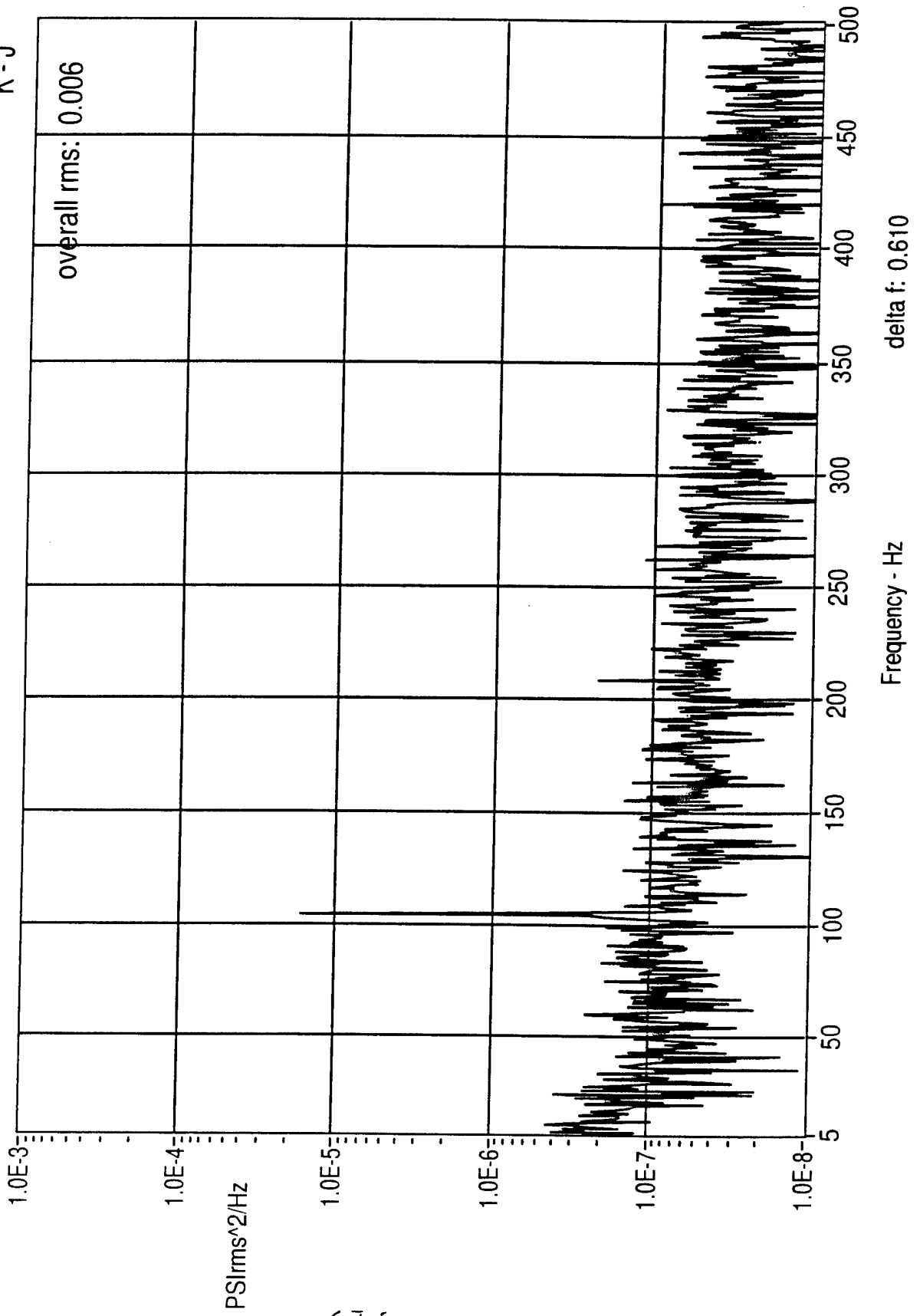
F-15 TPN\_3343: alpha=32 beta=0 bp=45



F-15 TPN\_3369: alpha=8 beta=-4 bp=45

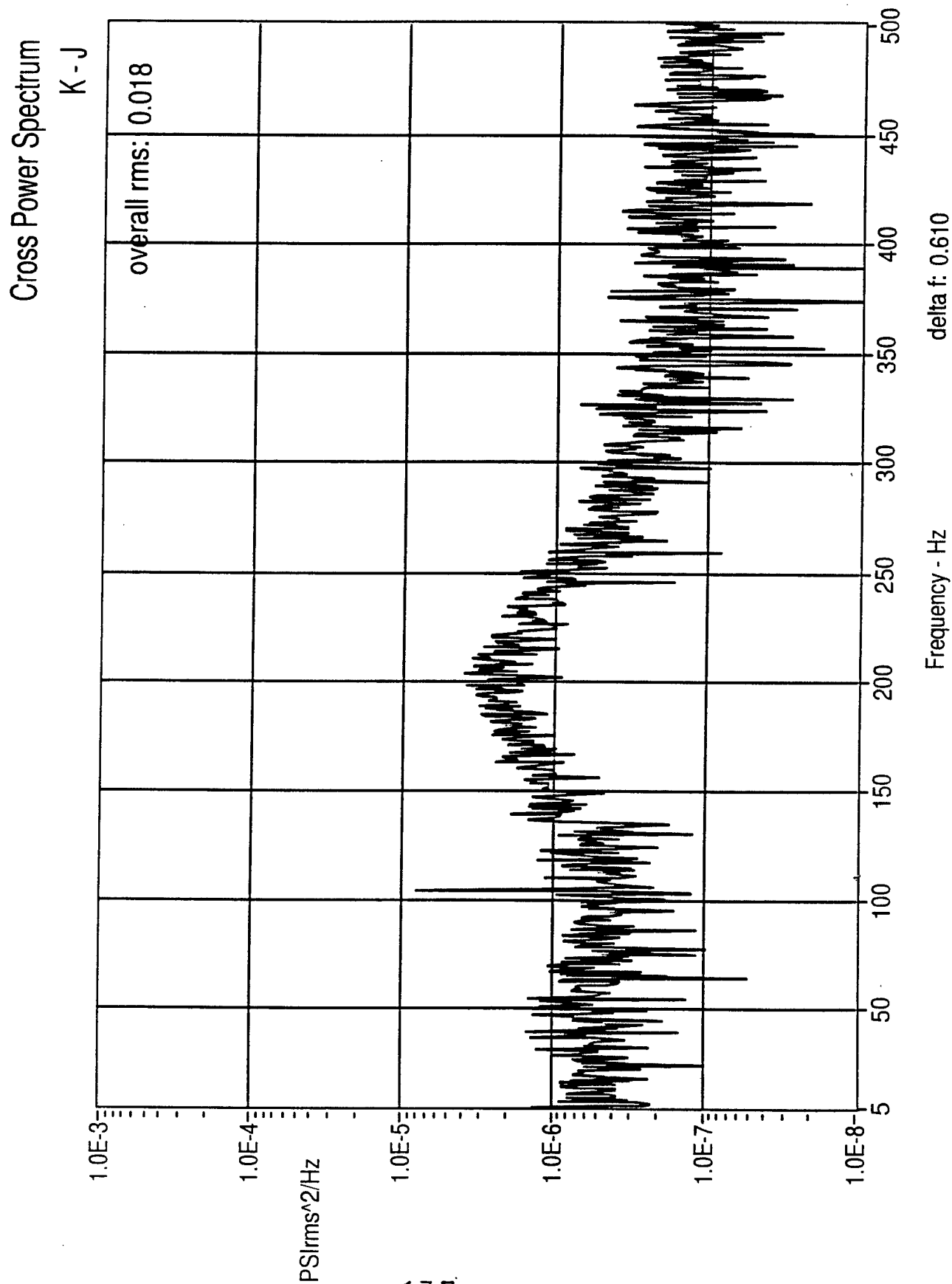
# Cross Power Spectrum

K - J





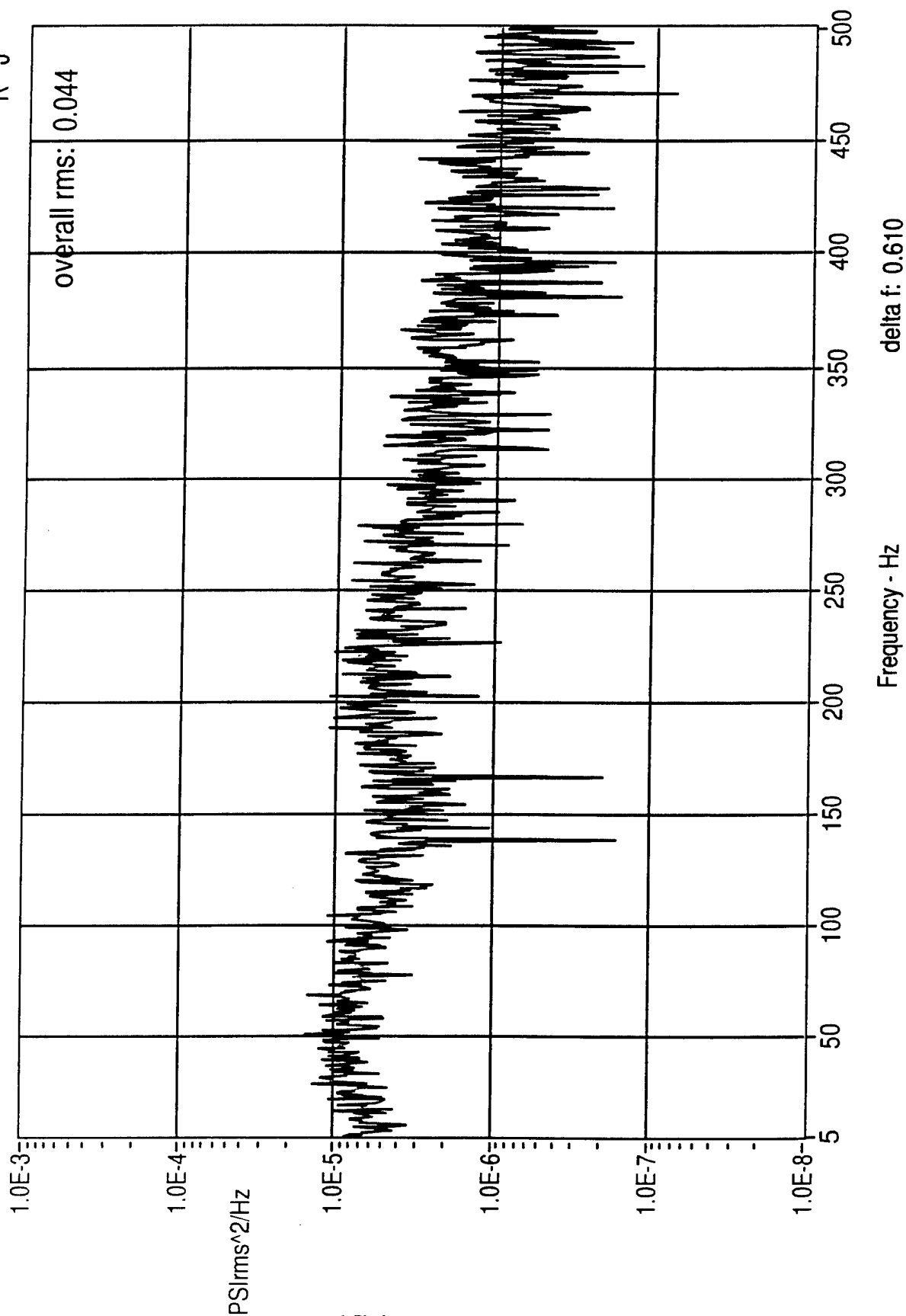
F-15 TPN\_3375: alpha=20 beta=-4 bp=45



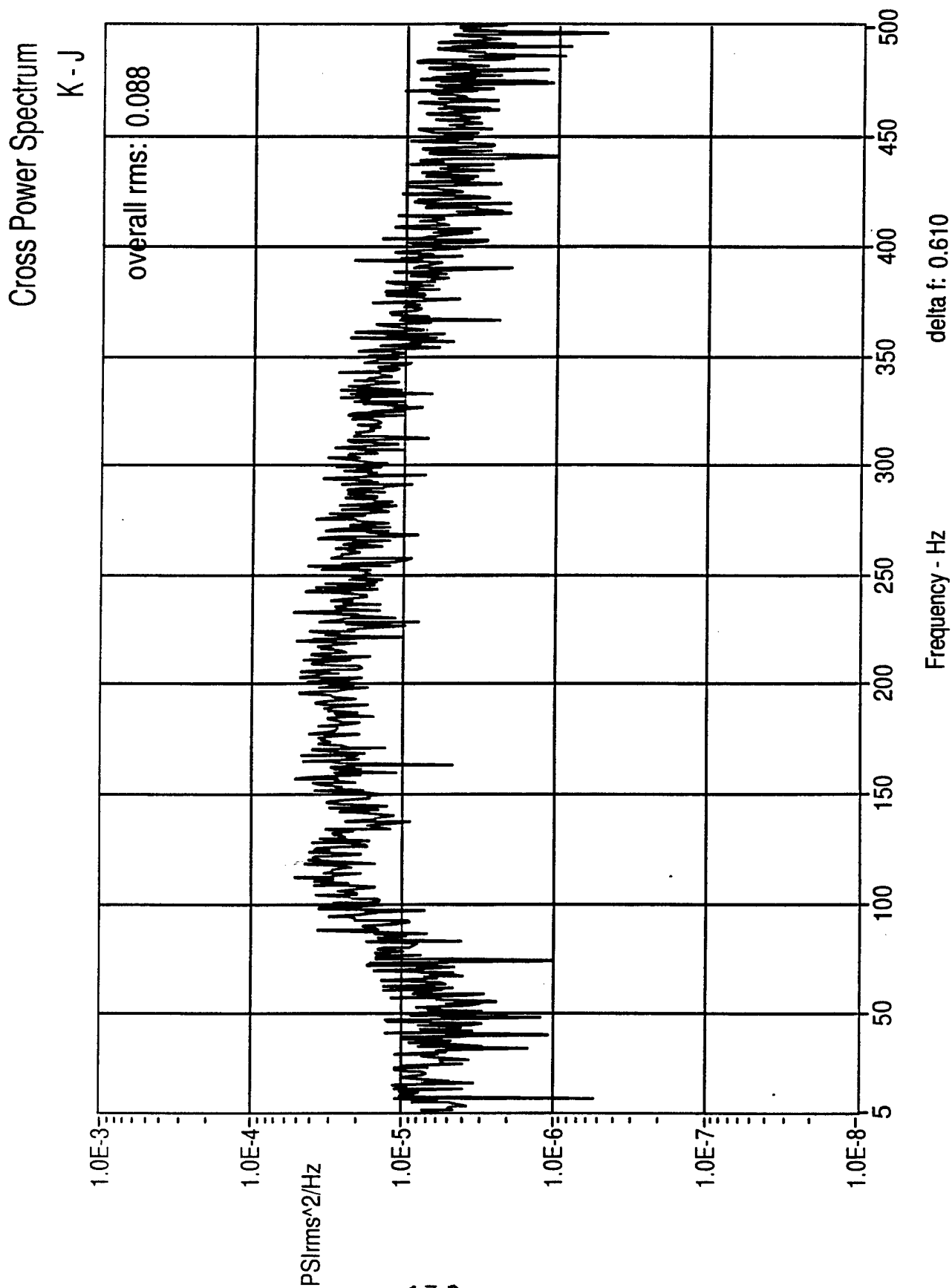
F-15 TPN\_3377: alpha=24 beta=-4 bp=45

# Cross Power Spectrum

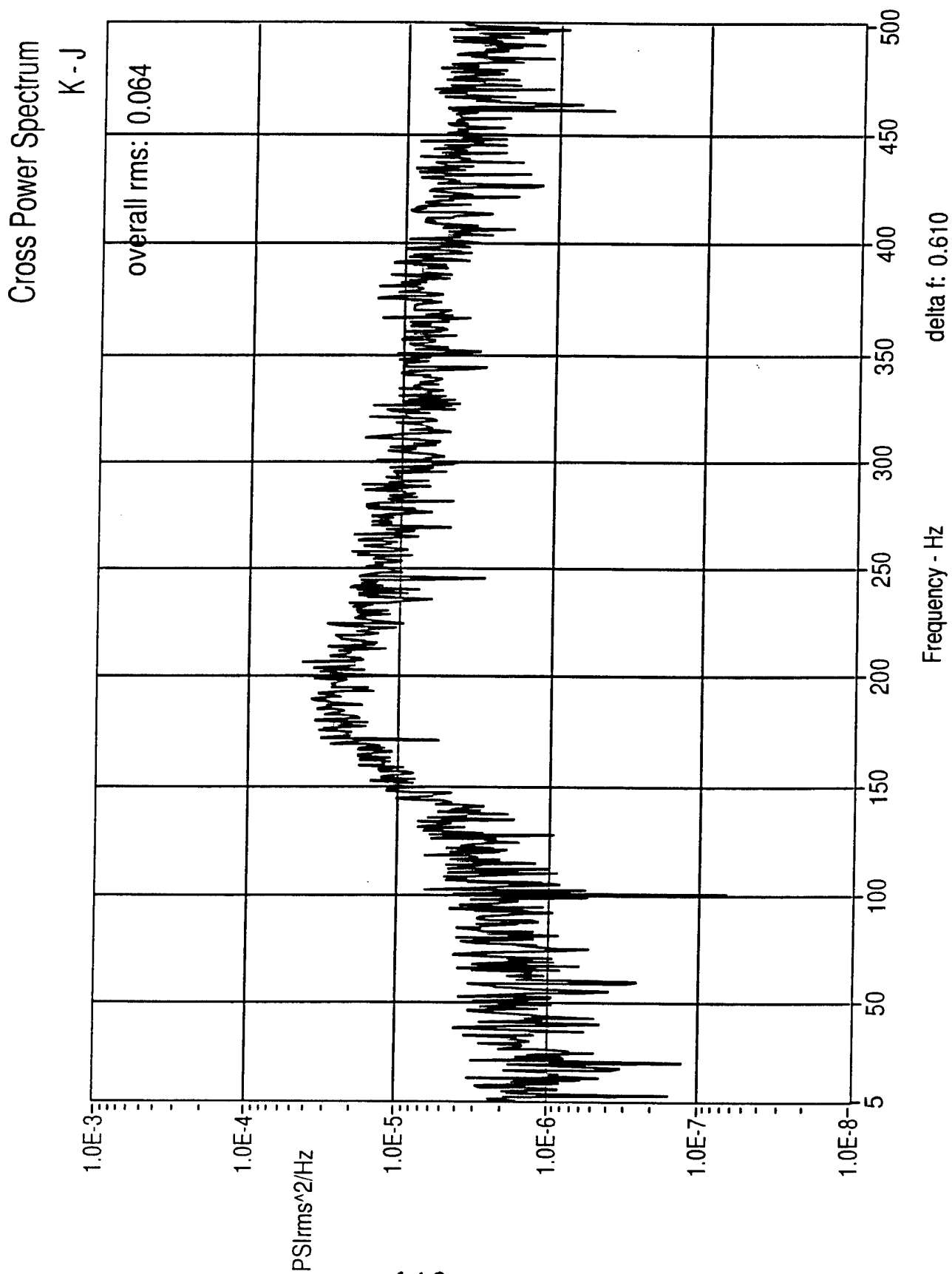
K - J



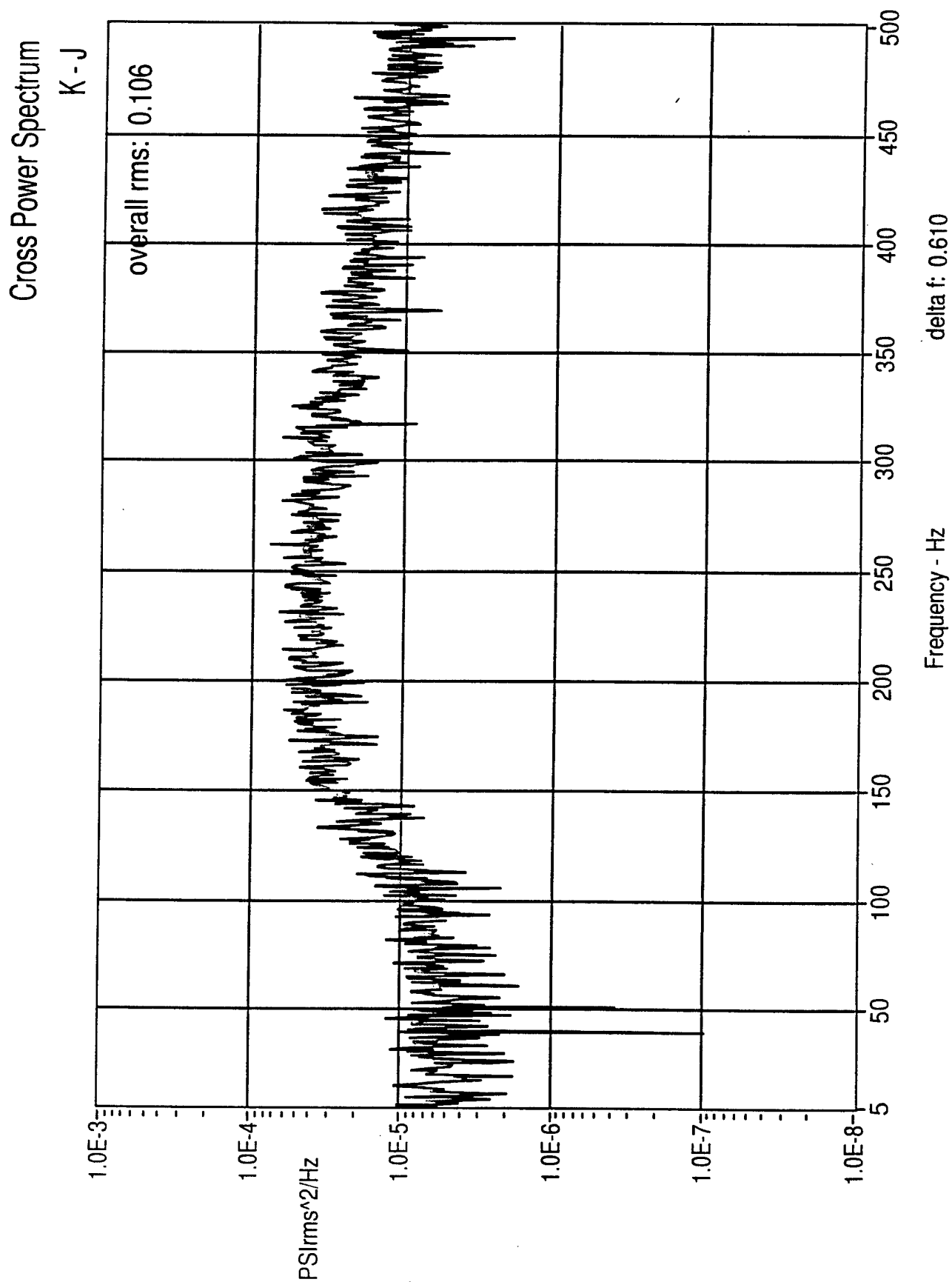
F-15 TPN\_3379: alpha=32 beta=-4 bp=45



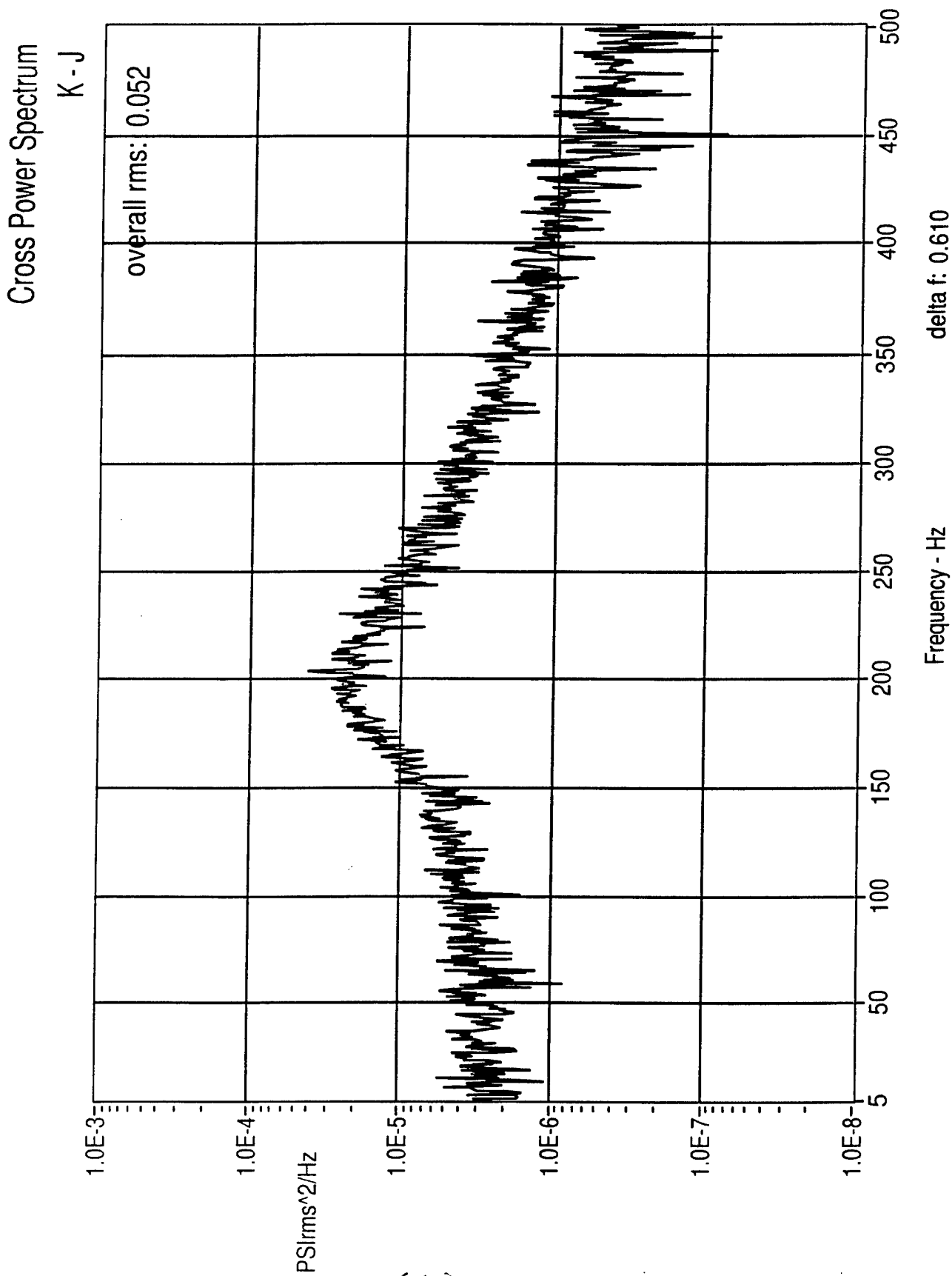
F-15 TPN\_3046: alpha=20 beta=4 bp=65



F-15 TPN\_3048: alpha=24 beta=4 bp=65



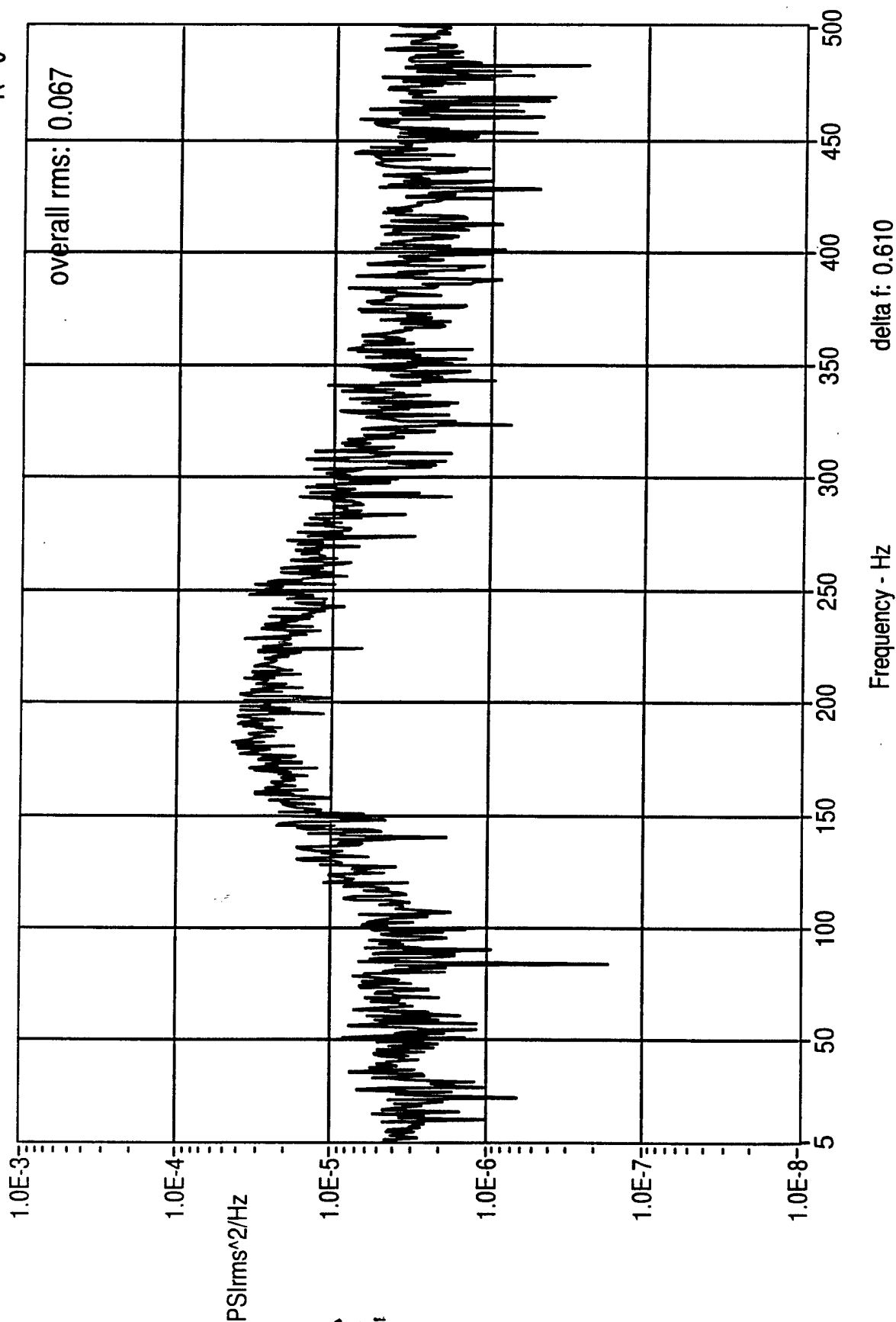
F-15 TPN\_3040: alpha=20 beta=0 bp=65



F-15 TPN\_3042: alpha=24 beta=0 bp=65

# Cross Power Spectrum

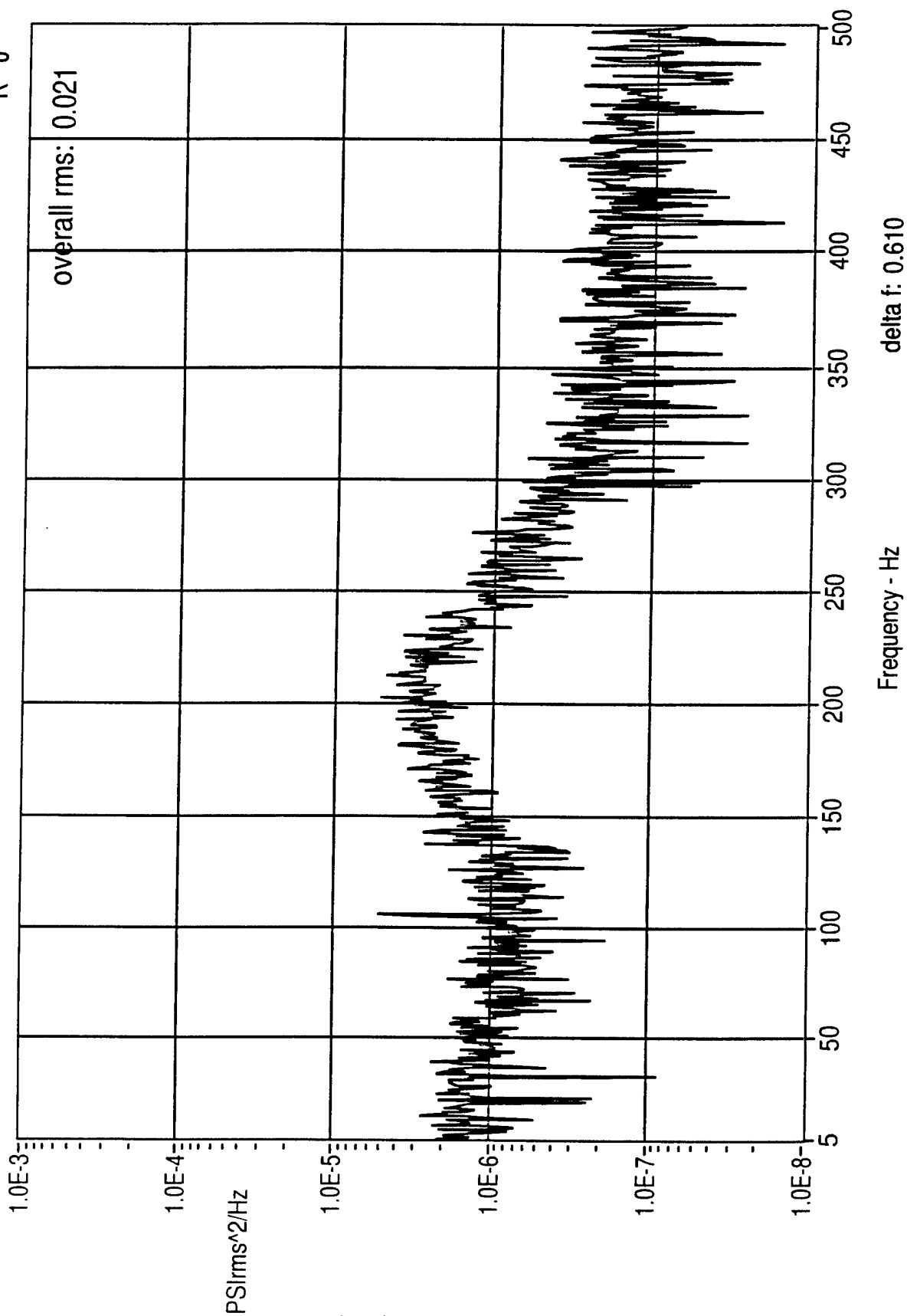
K - J



F-15 TPN\_3034: alpha=20 beta=-4 bp=6

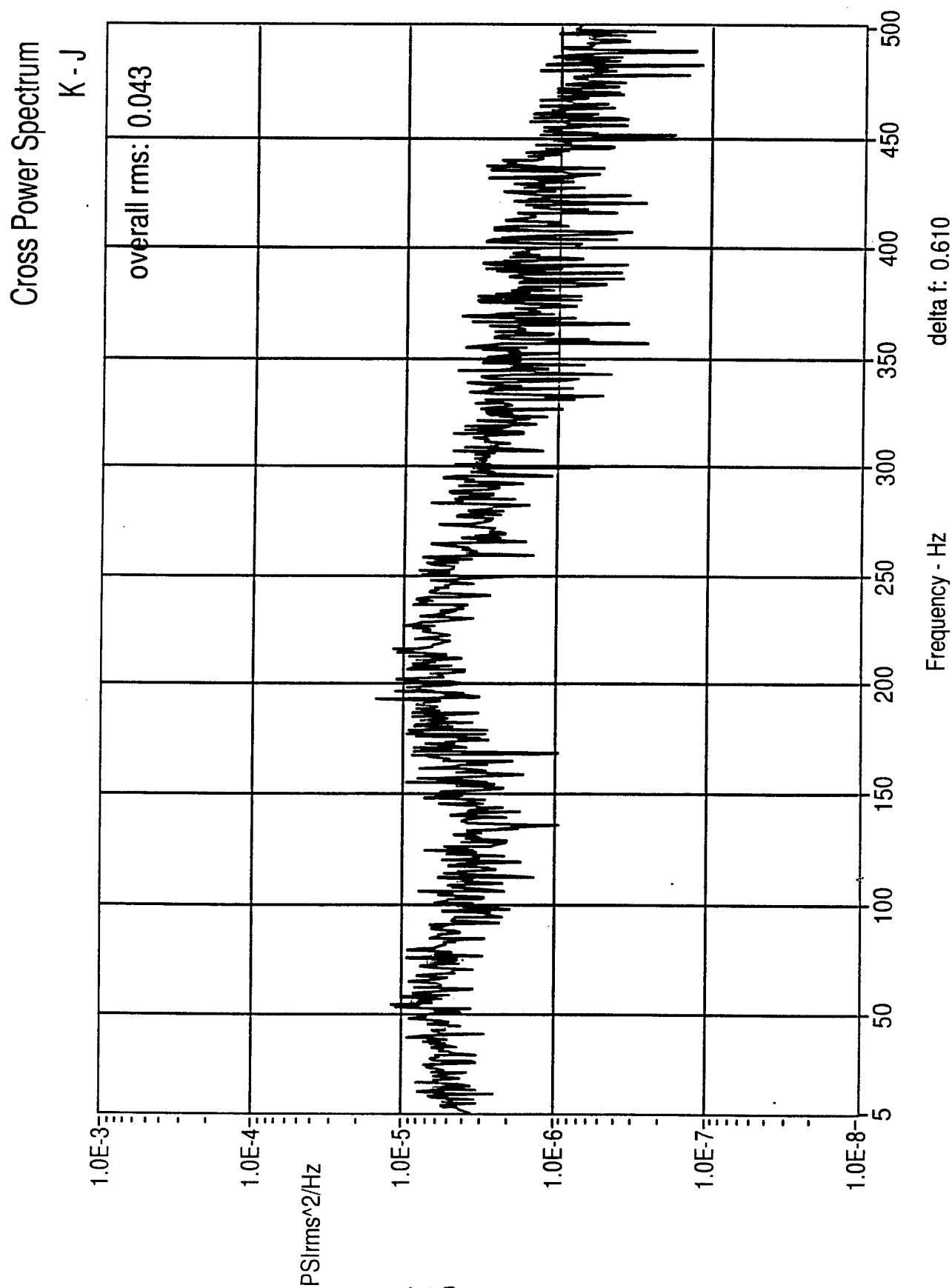
# Cross Power Spectrum

K - J

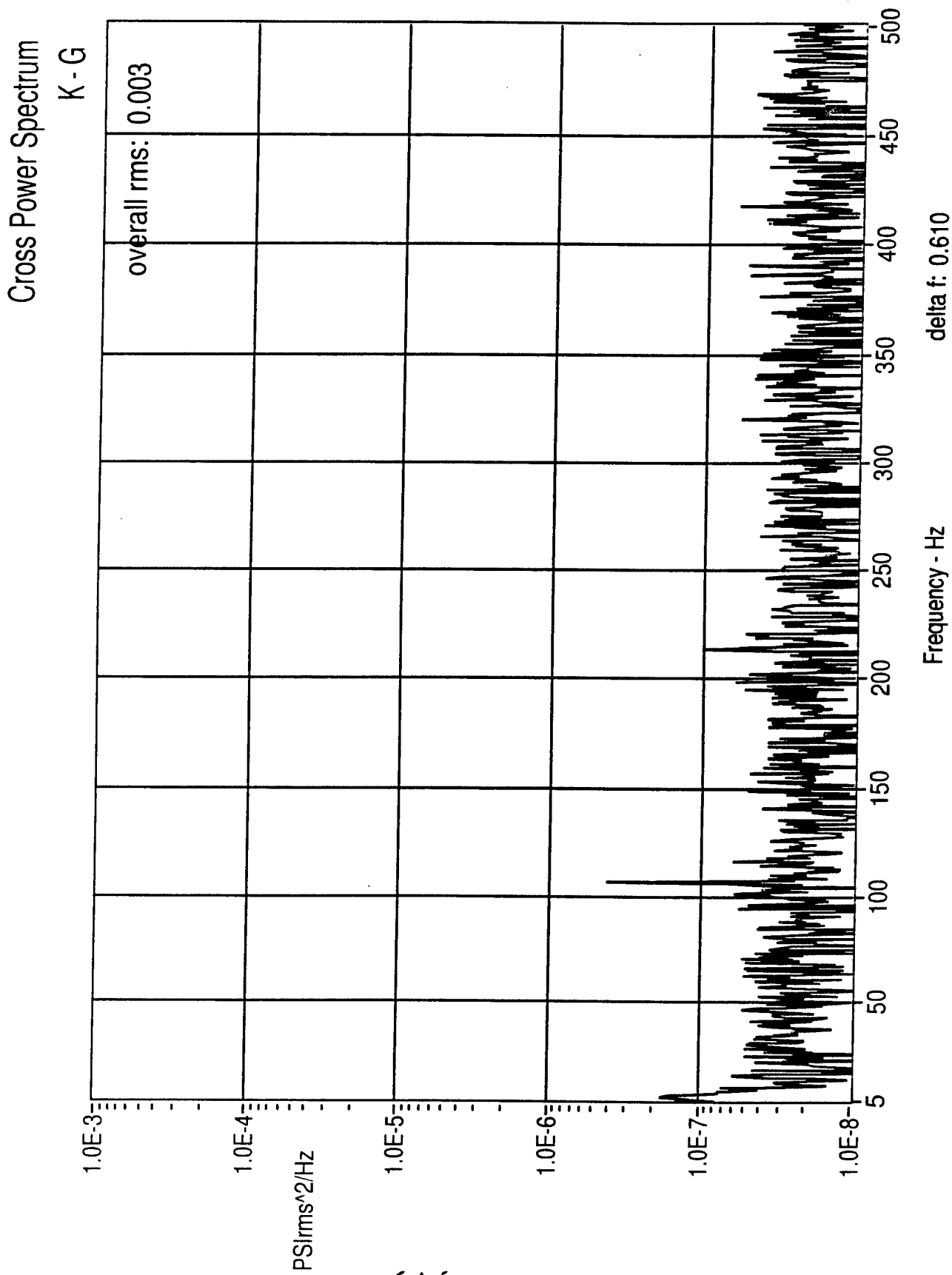




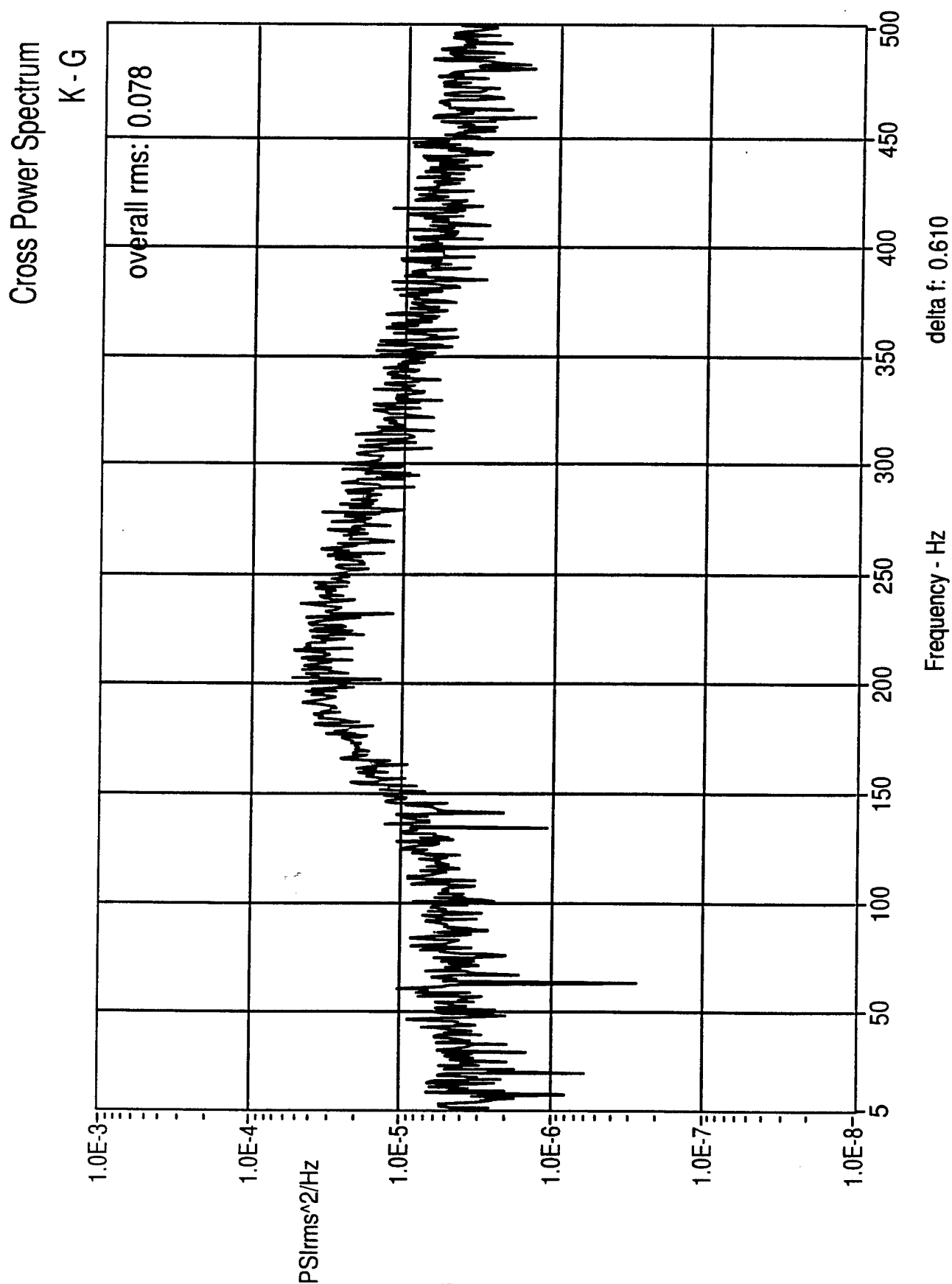
F-15 TPN\_3036: alpha=24 beta=-4 bp=65



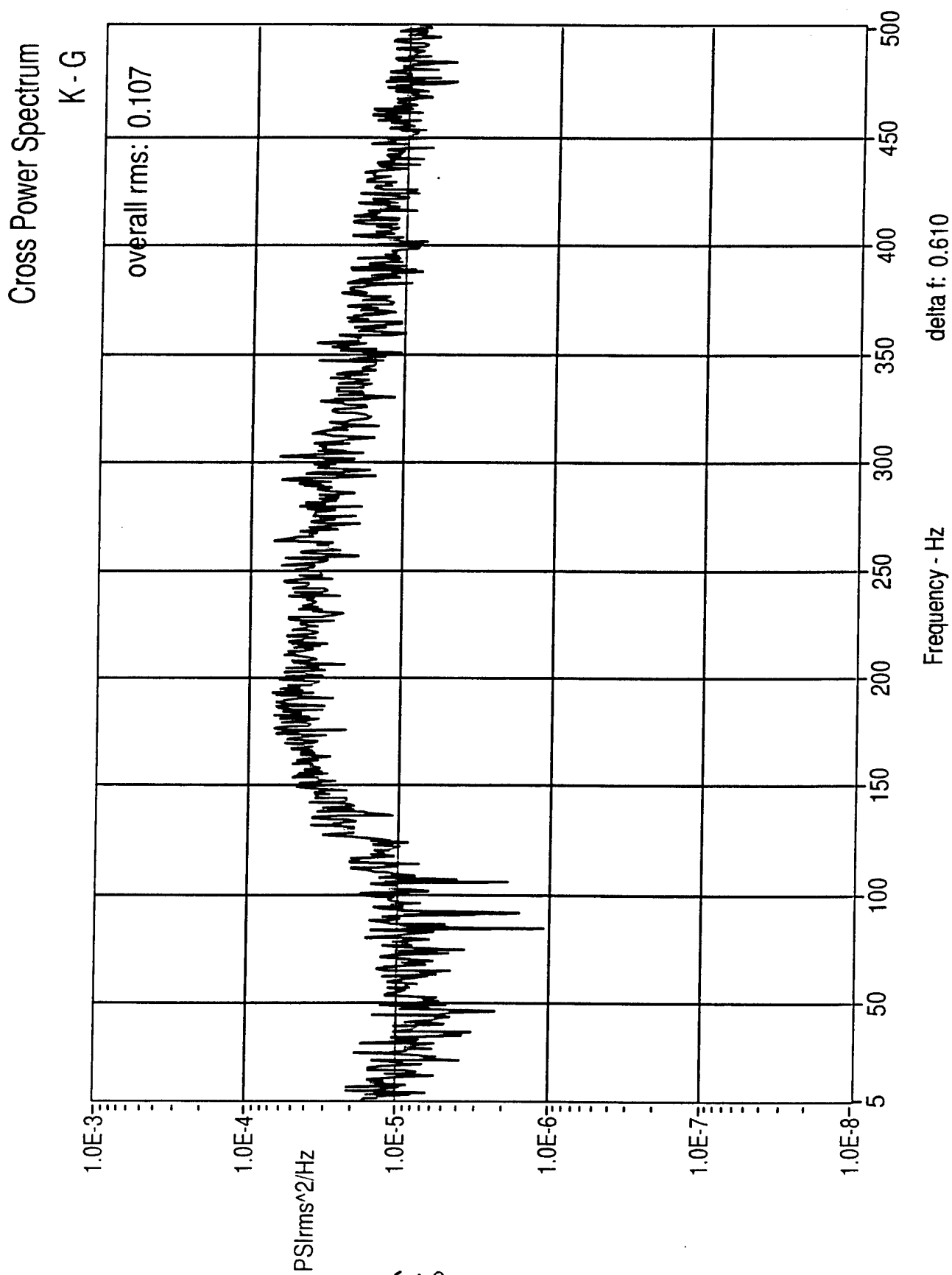
F-15 TPN\_2918: alpha=8 beta=4 bp=0



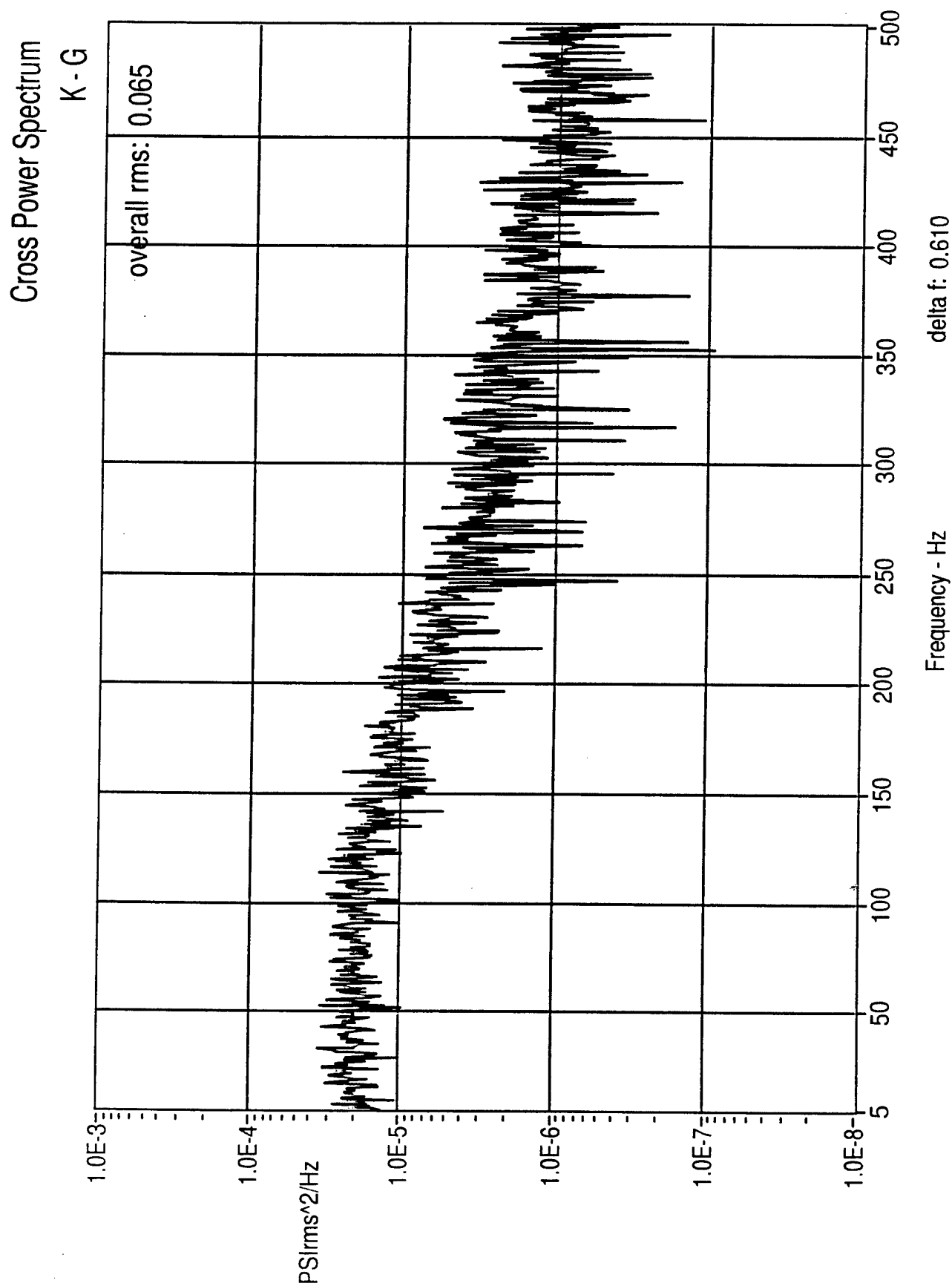
F-15 TPN\_2924: alpha=20 beta=4 bp=0



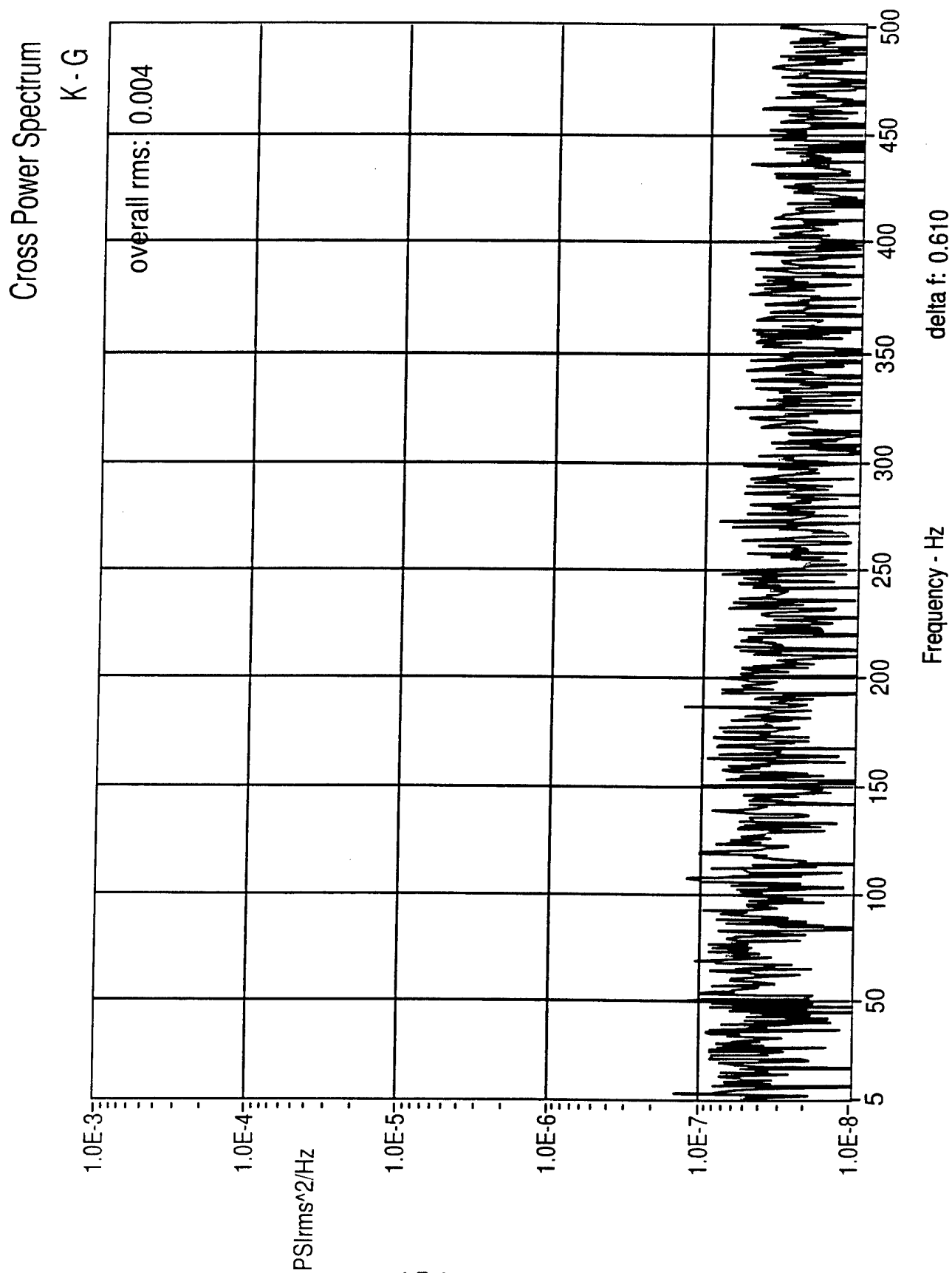
F-15 TPN\_2926: alpha=24 beta=4 bp=0



F-15 TPN\_2928: alpha=32 beta=4 bp=0



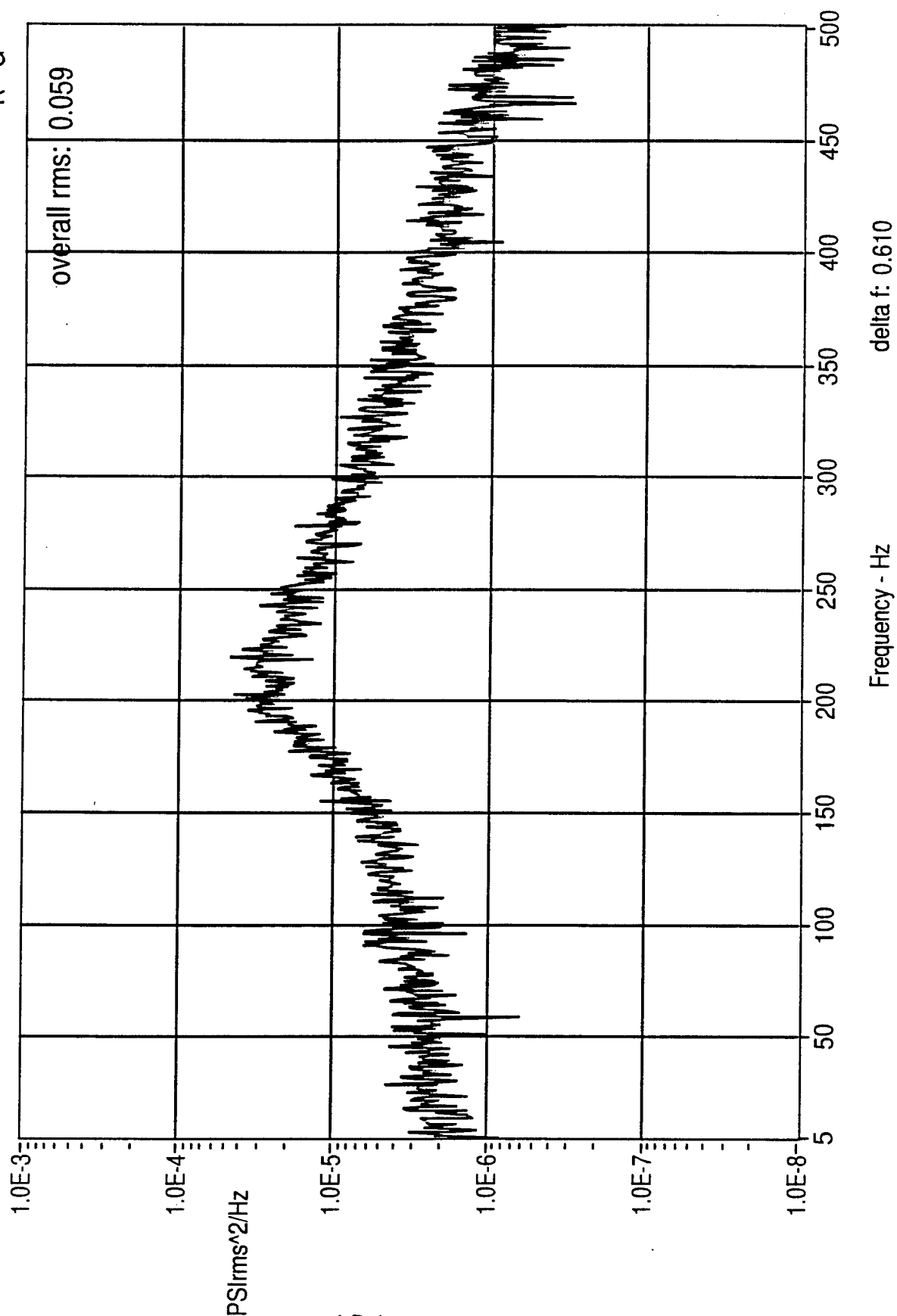
F-15 TPN\_2844: alpha=8 beta=0 bp=0



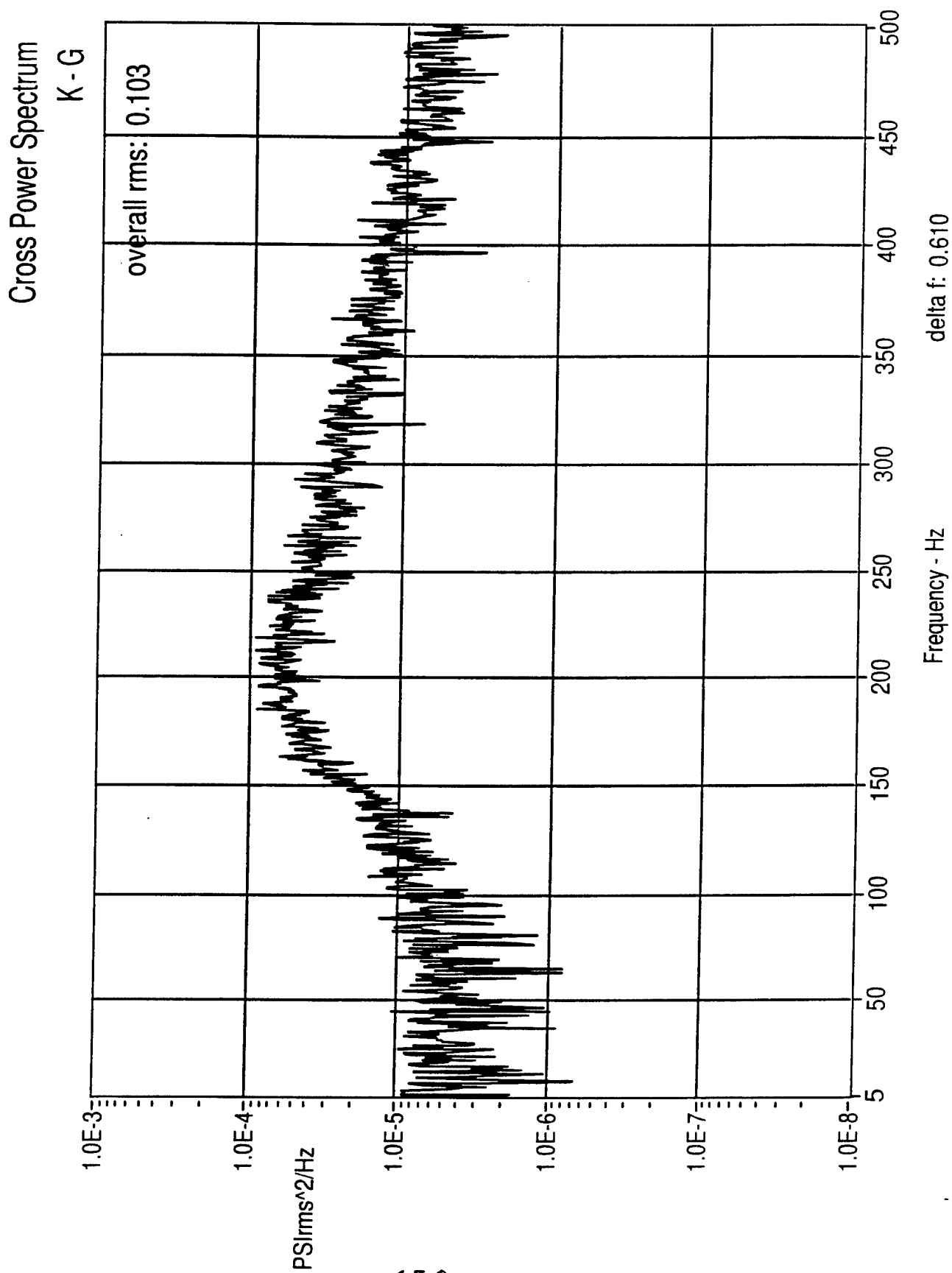
F-15 TPN\_2850: alpha=20 beta=0 bp=0

# Cross Power Spectrum

K - G



F-15 TPN\_2852: alpha=24 beta=0 bp=0

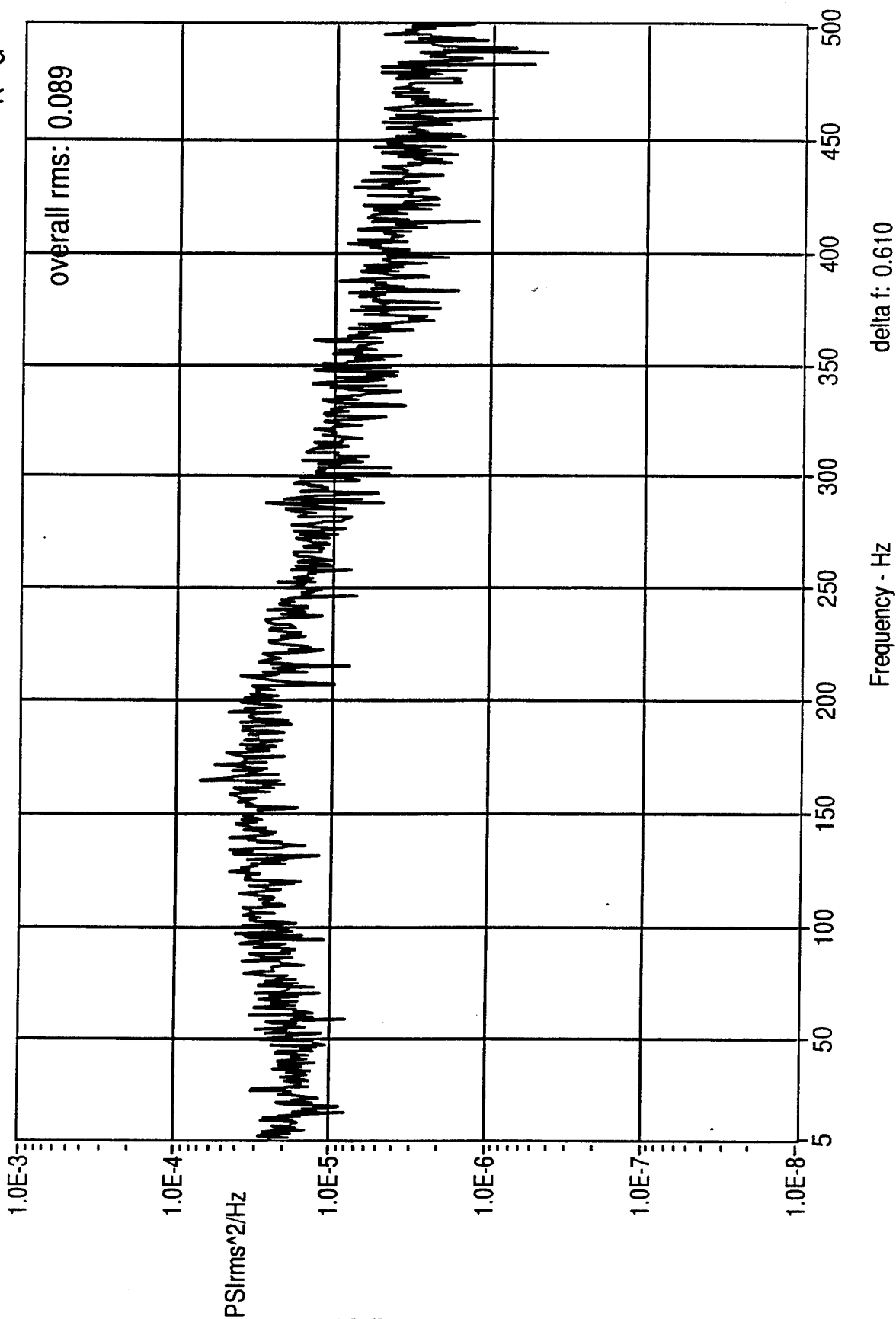




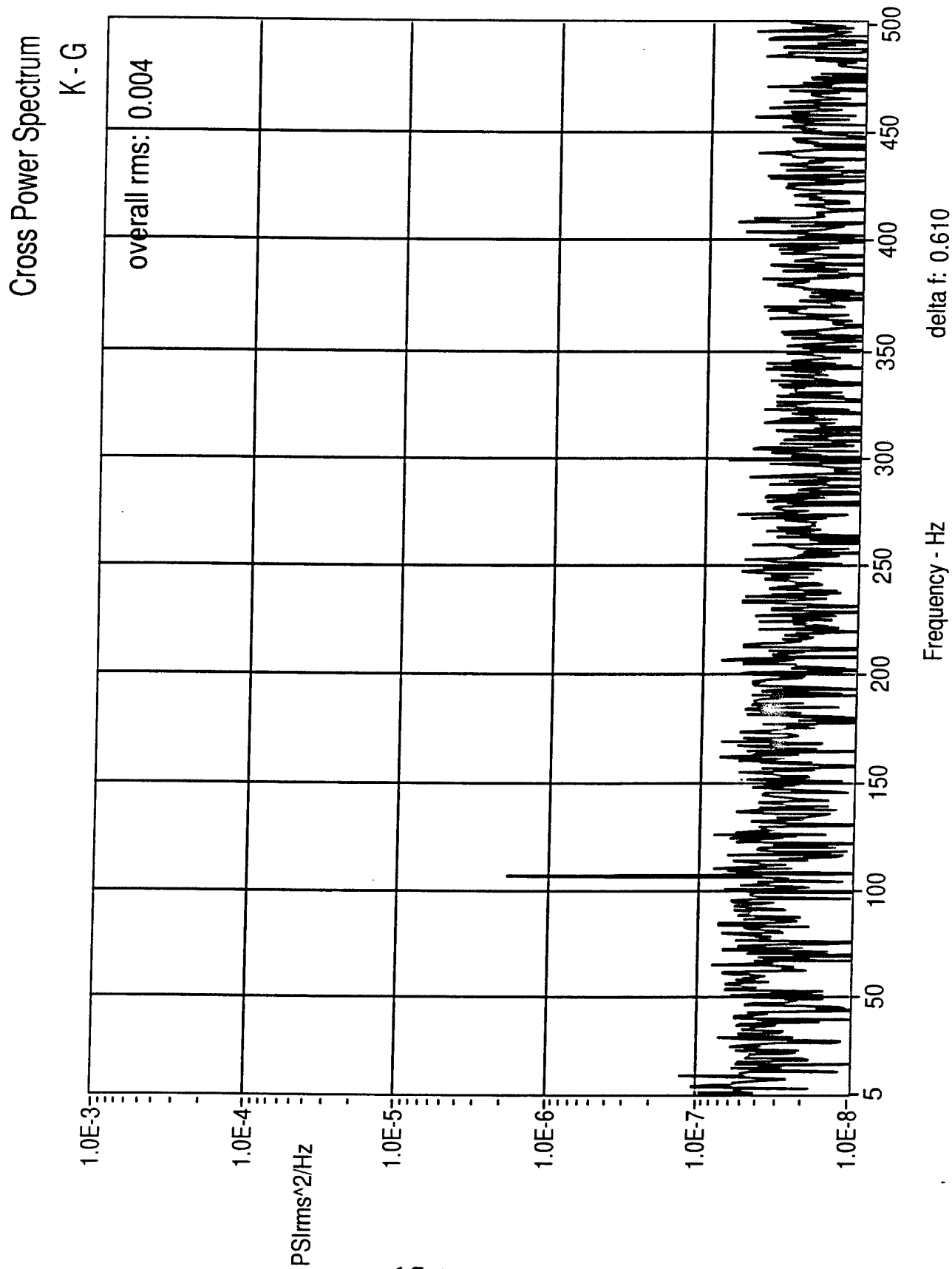
F-15 TPN\_2854: alpha=32 beta=0 bp=0

# Cross Power Spectrum

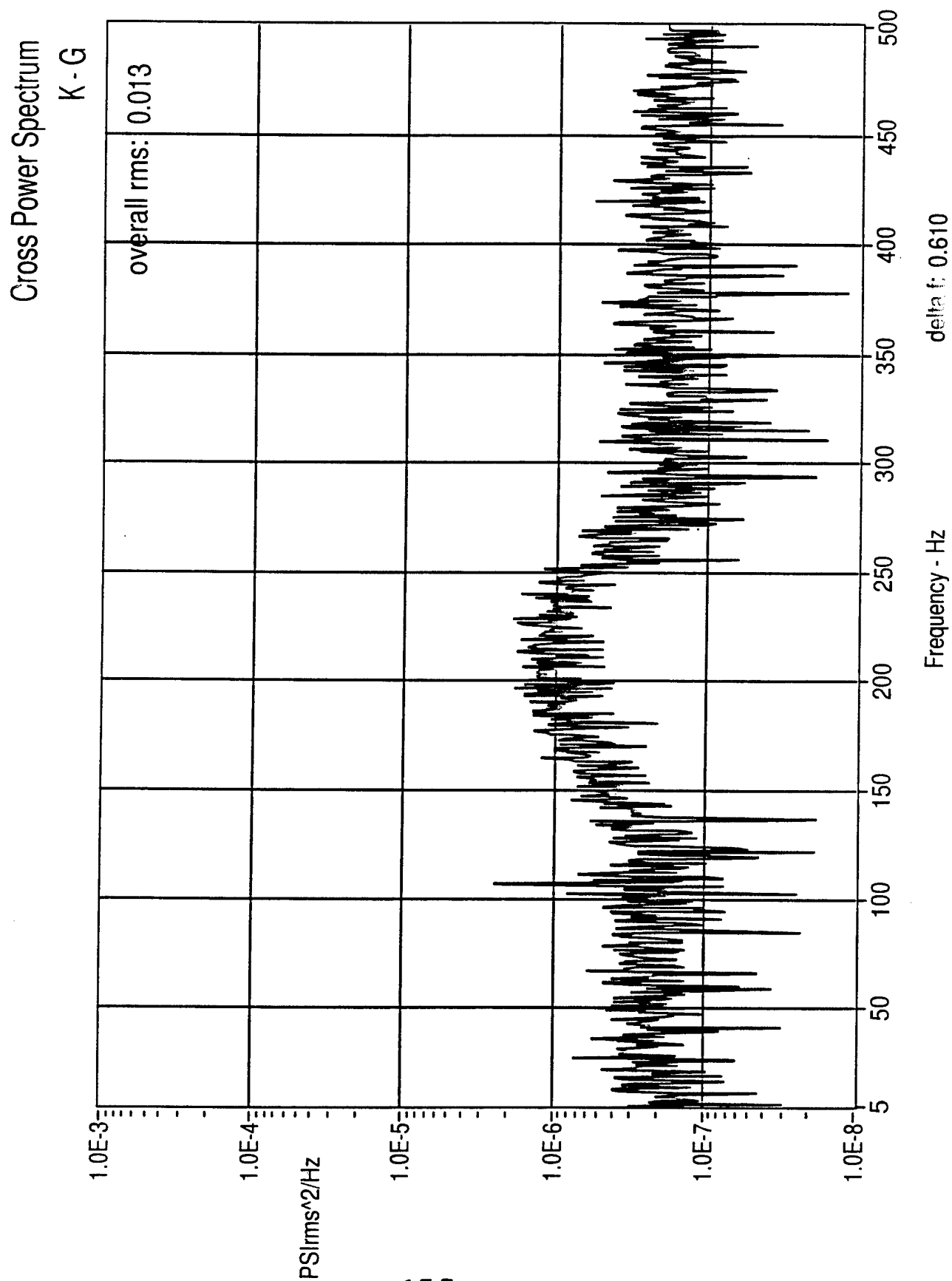
K - G



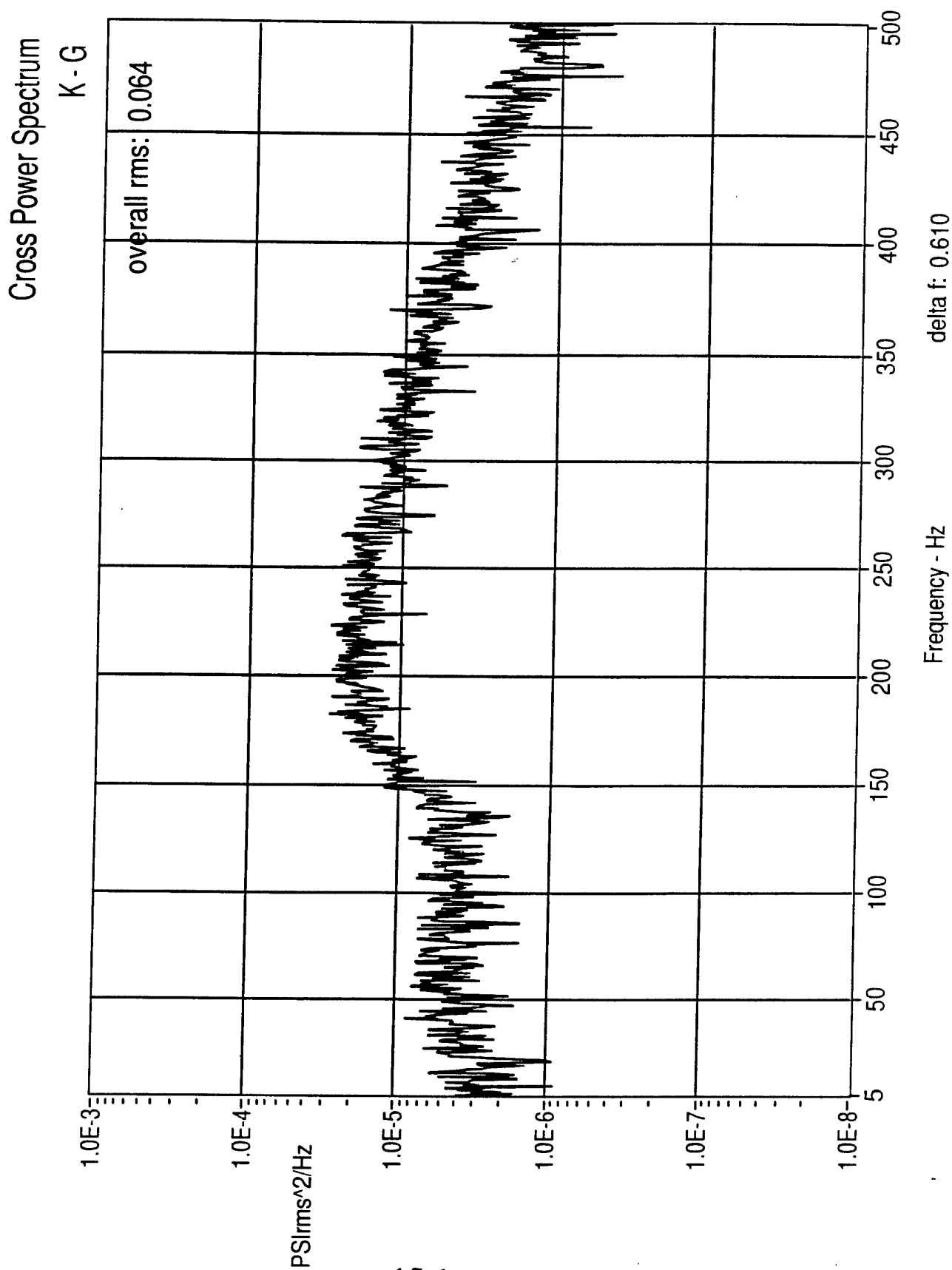
F-15 TPN\_2864: alpha=8 beta=-4 bp=0



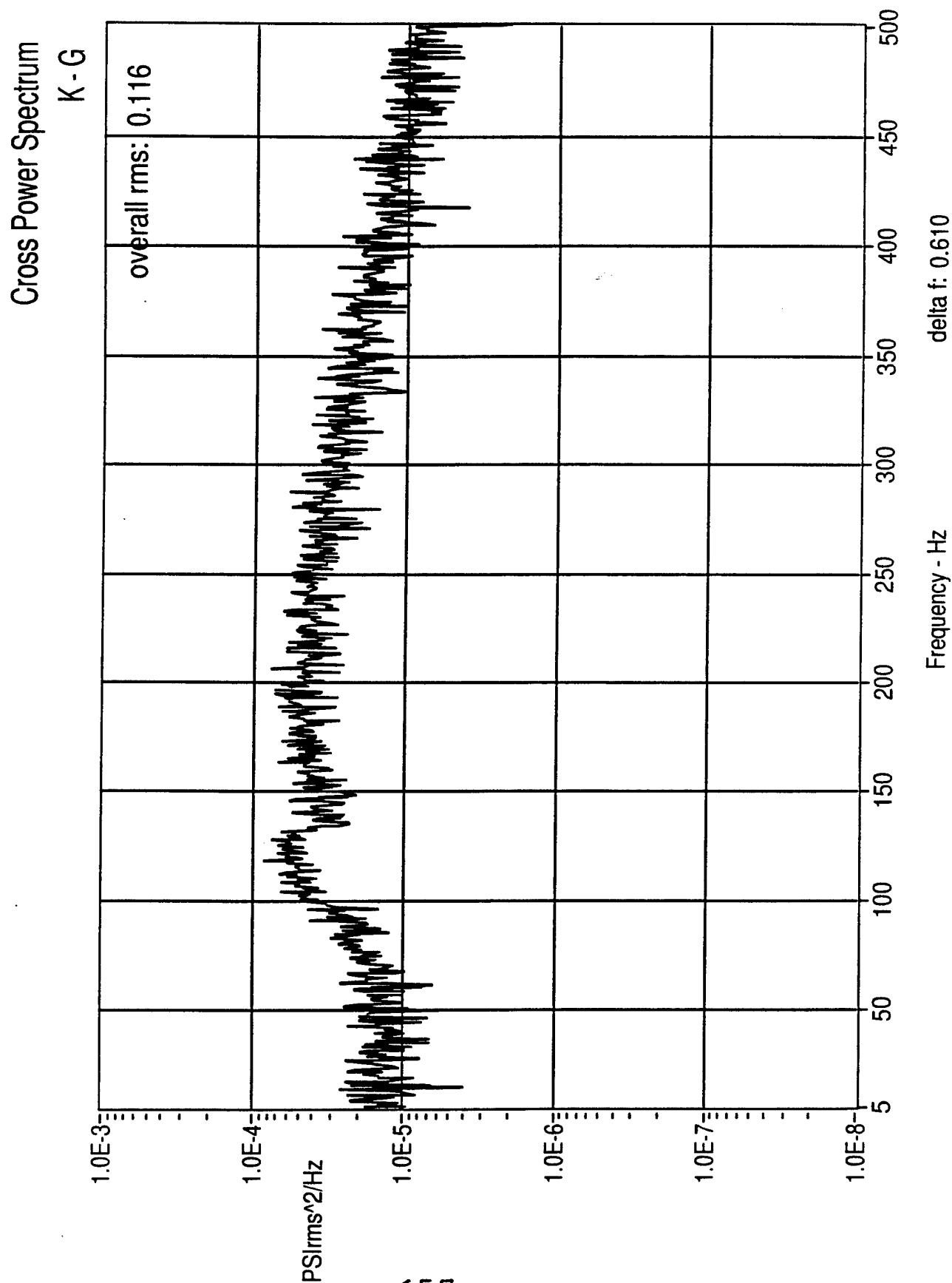
F-15 TPN\_2870: alpha=20 beta=-4 bp=0



F-15 TPN\_2872: alpha=24 beta=-4 bp=0



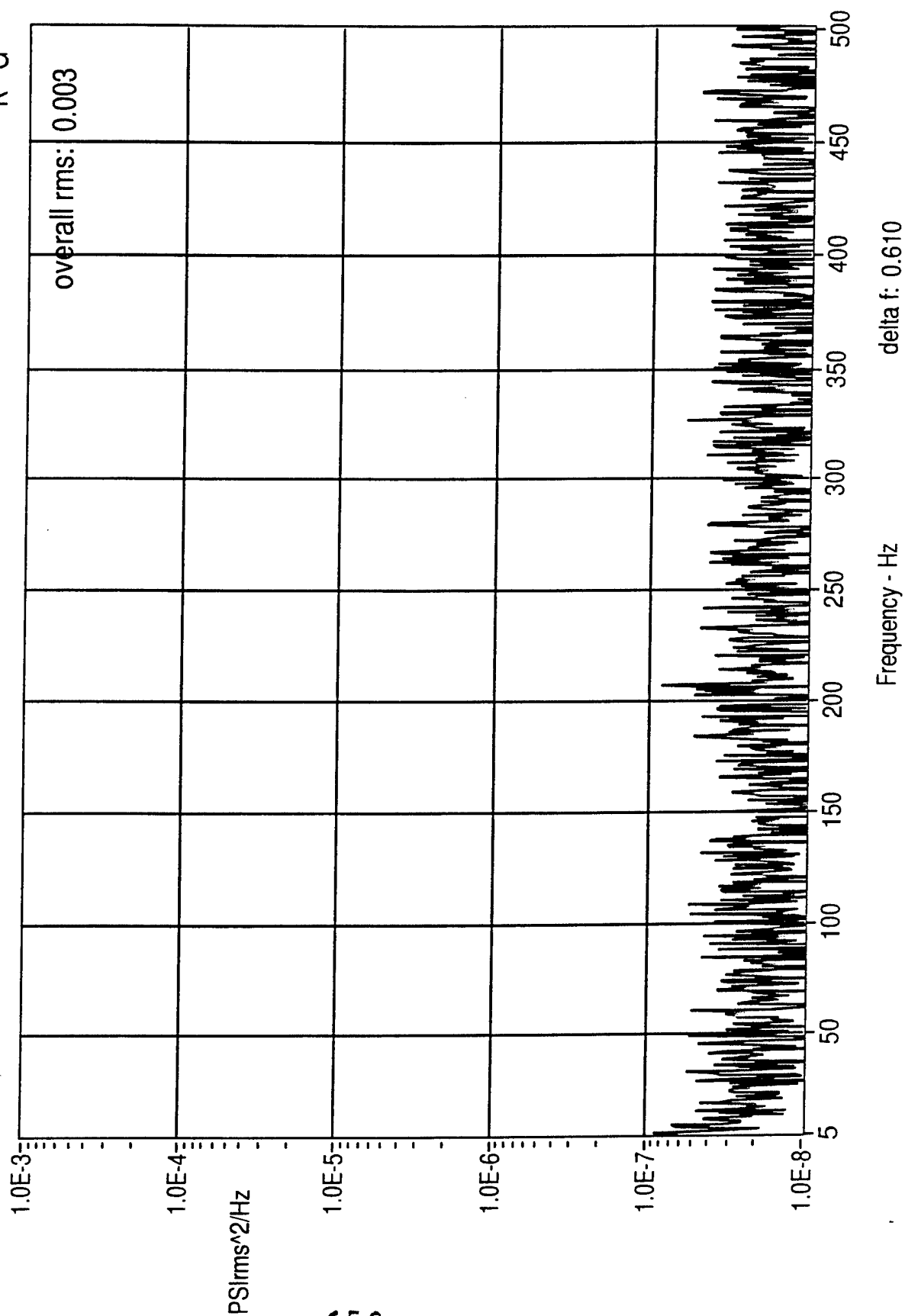
F-15 TPN\_2874: alpha=32 beta=-4 bp=0



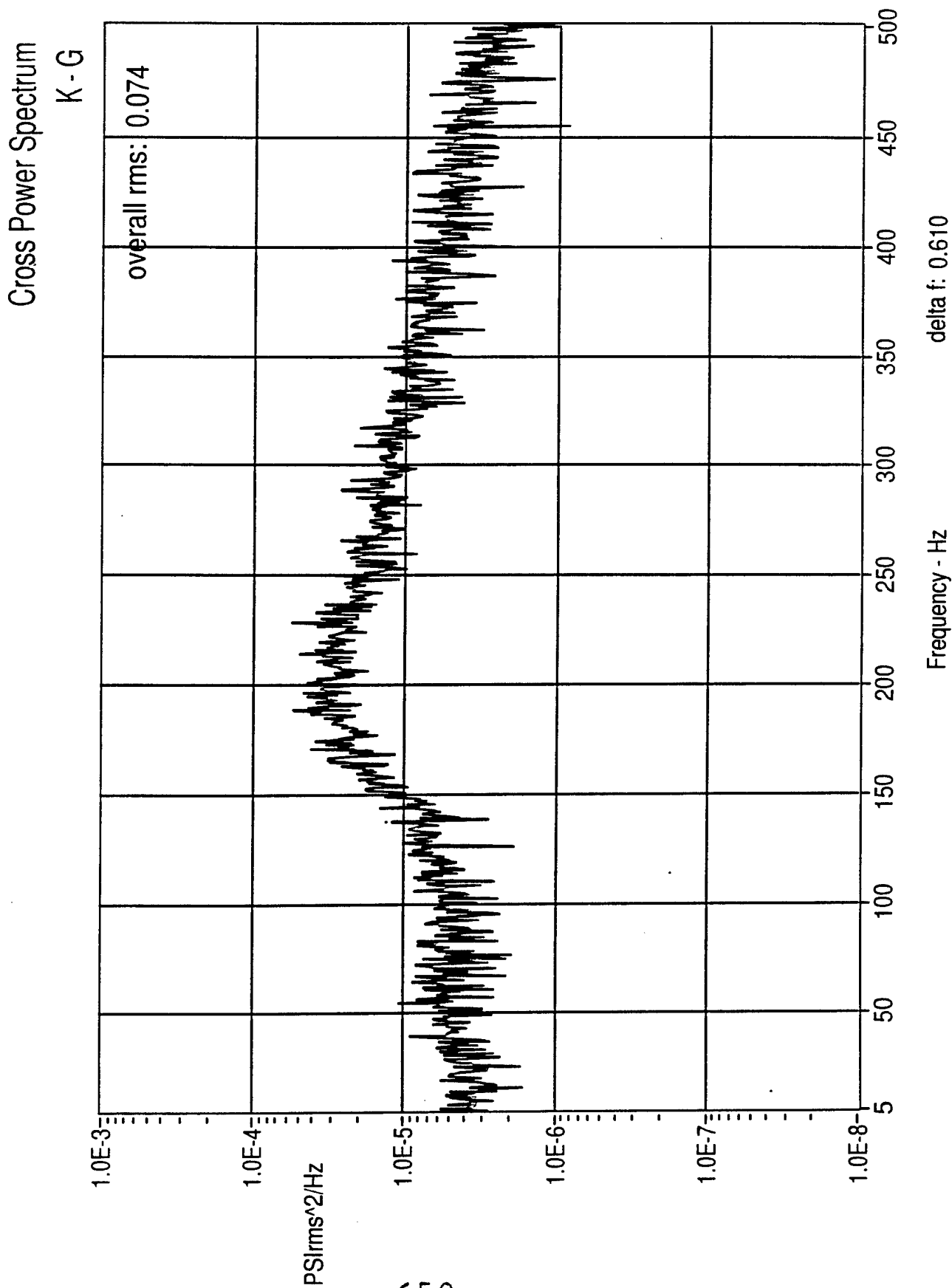
F-15 TPN\_3351: alpha=8 beta=4 bp=45

# Cross Power Spectrum

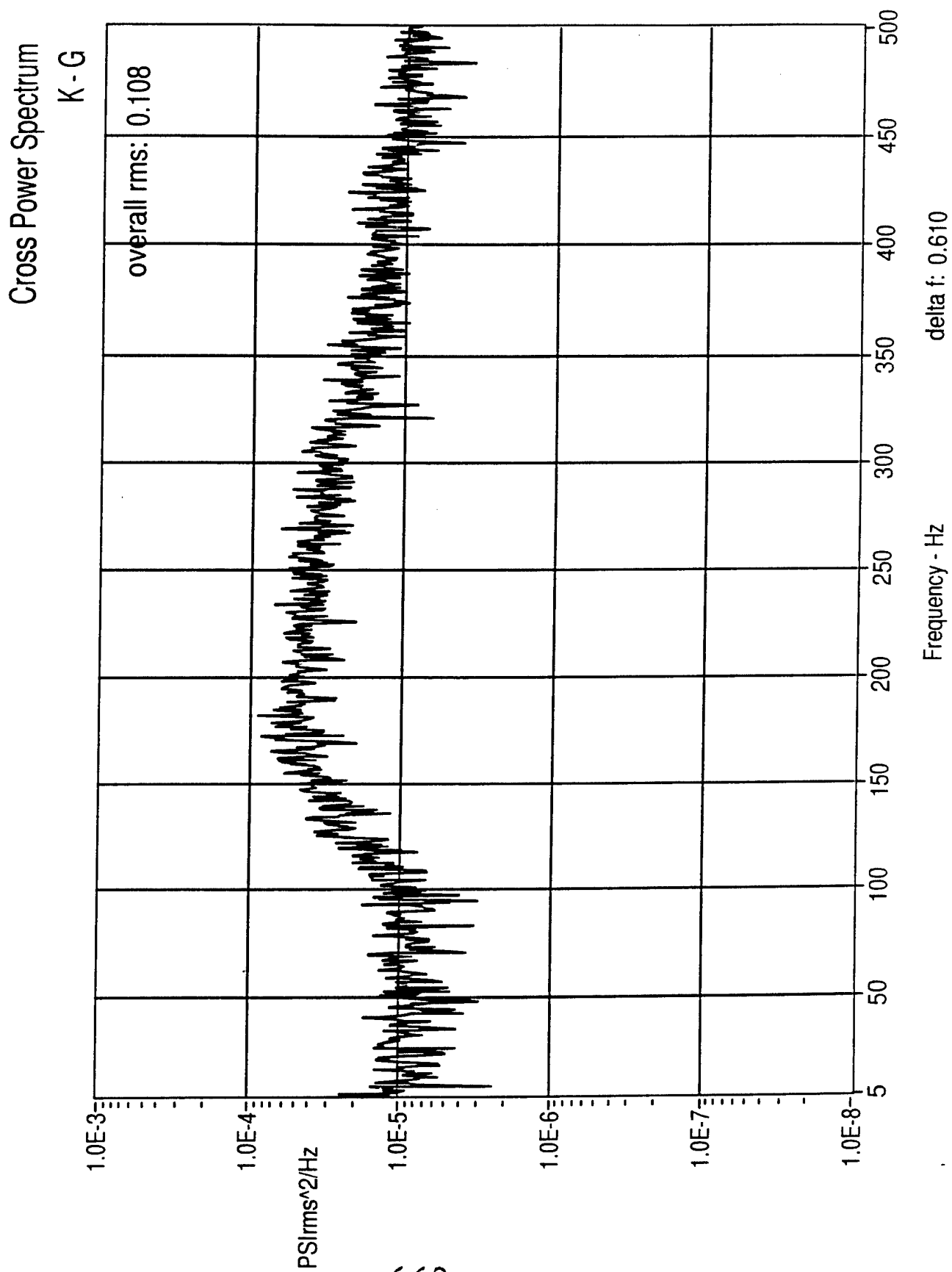
K - G



F-15 TPN\_3357: alpha=20 beta=4 bp=45



F-15 TPN\_3359: alpha=24 beta=4 bp=45

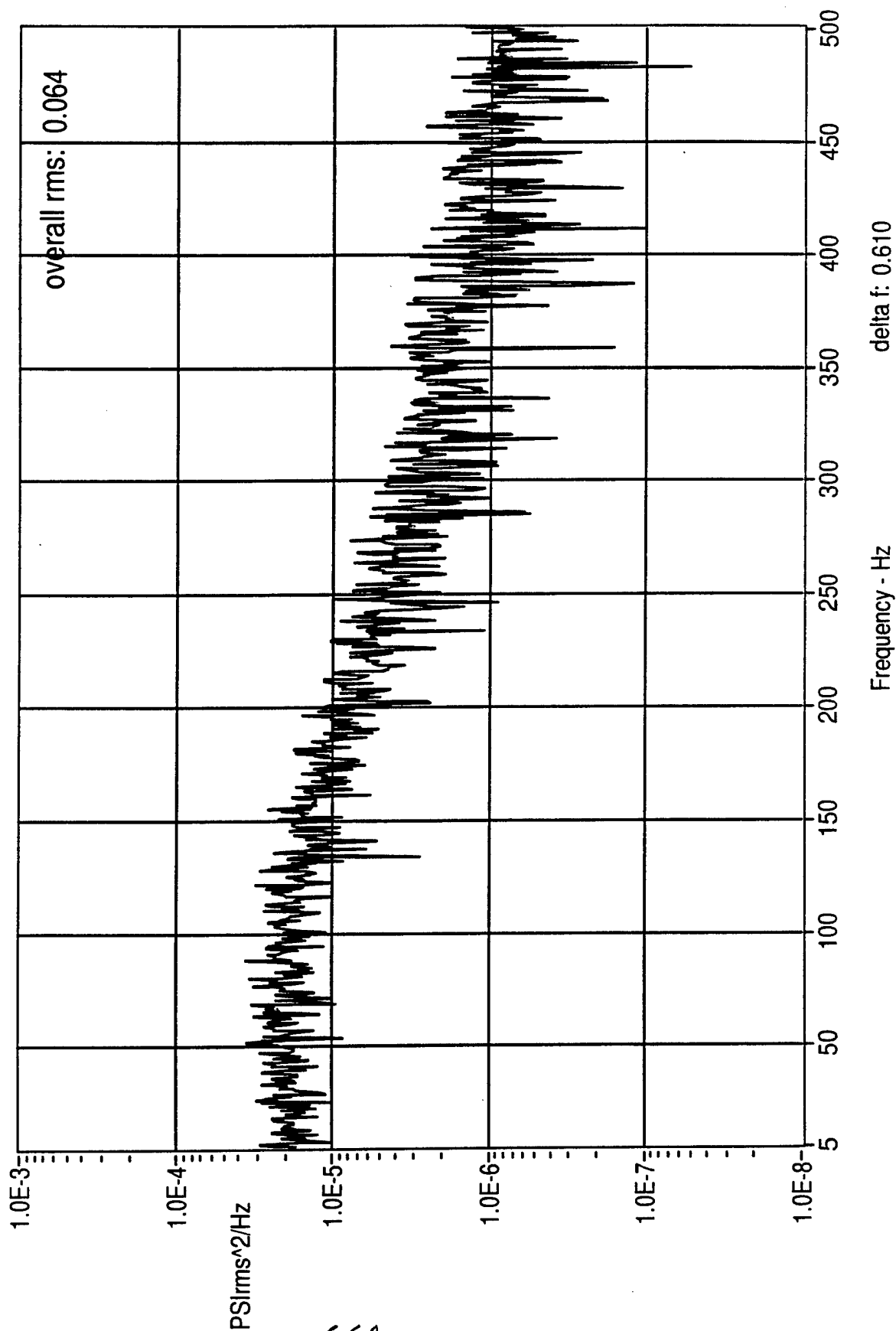




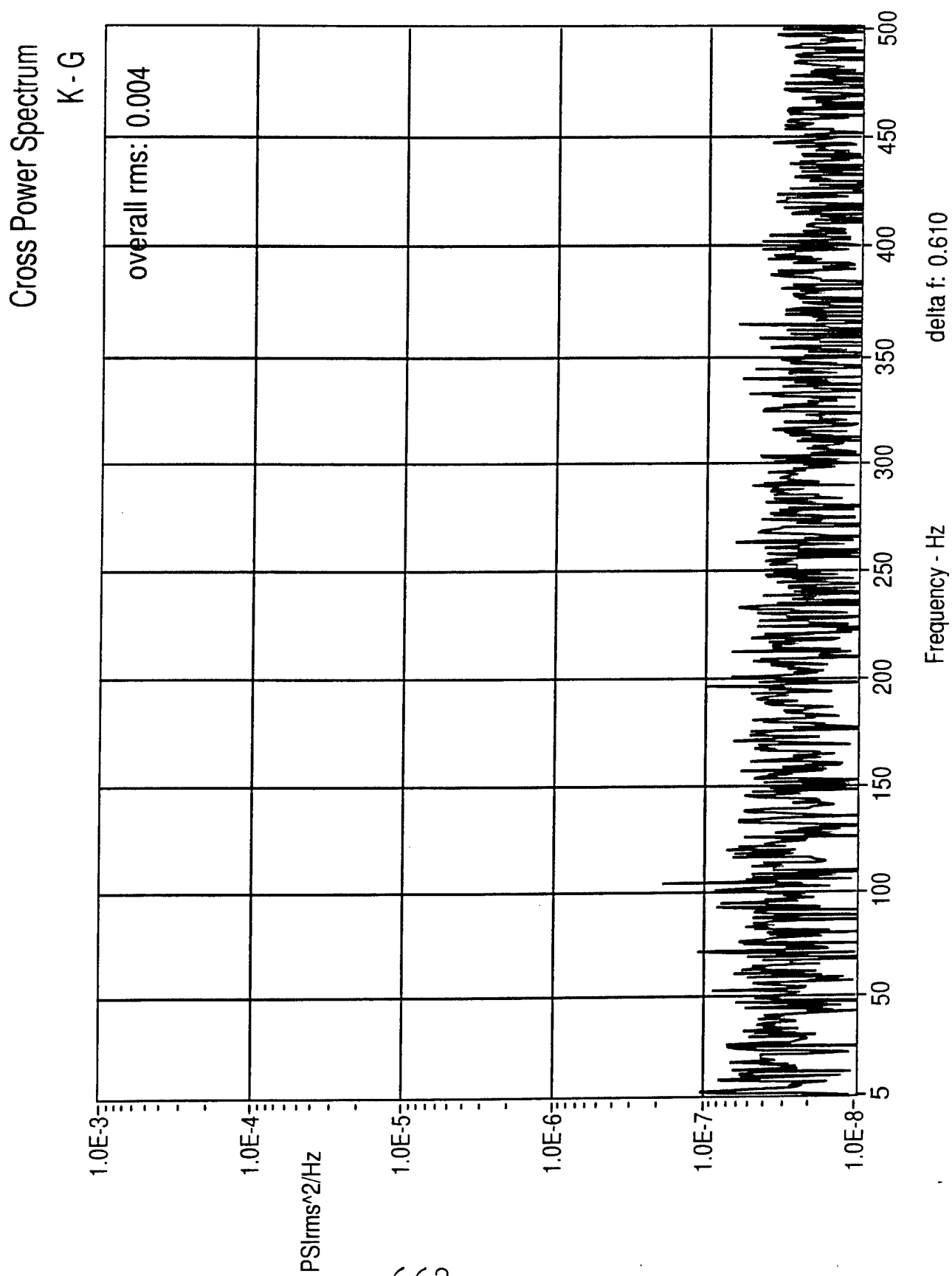
F-15 TPN\_3361: alpha=32 beta=4 bp=45

# Cross Power Spectrum

K - G



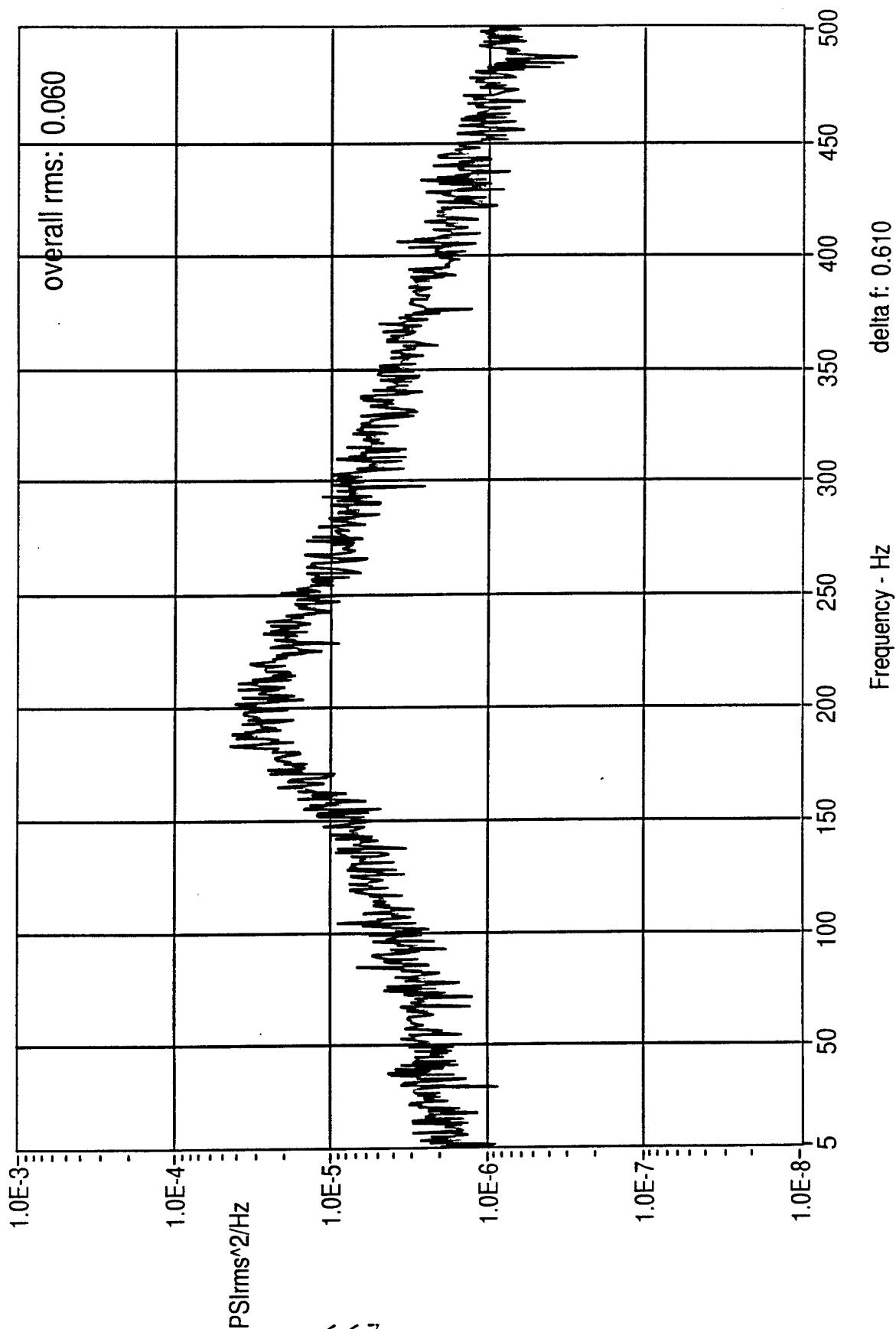
F-15 TPN\_3333: alpha=8 beta=0 bp=45



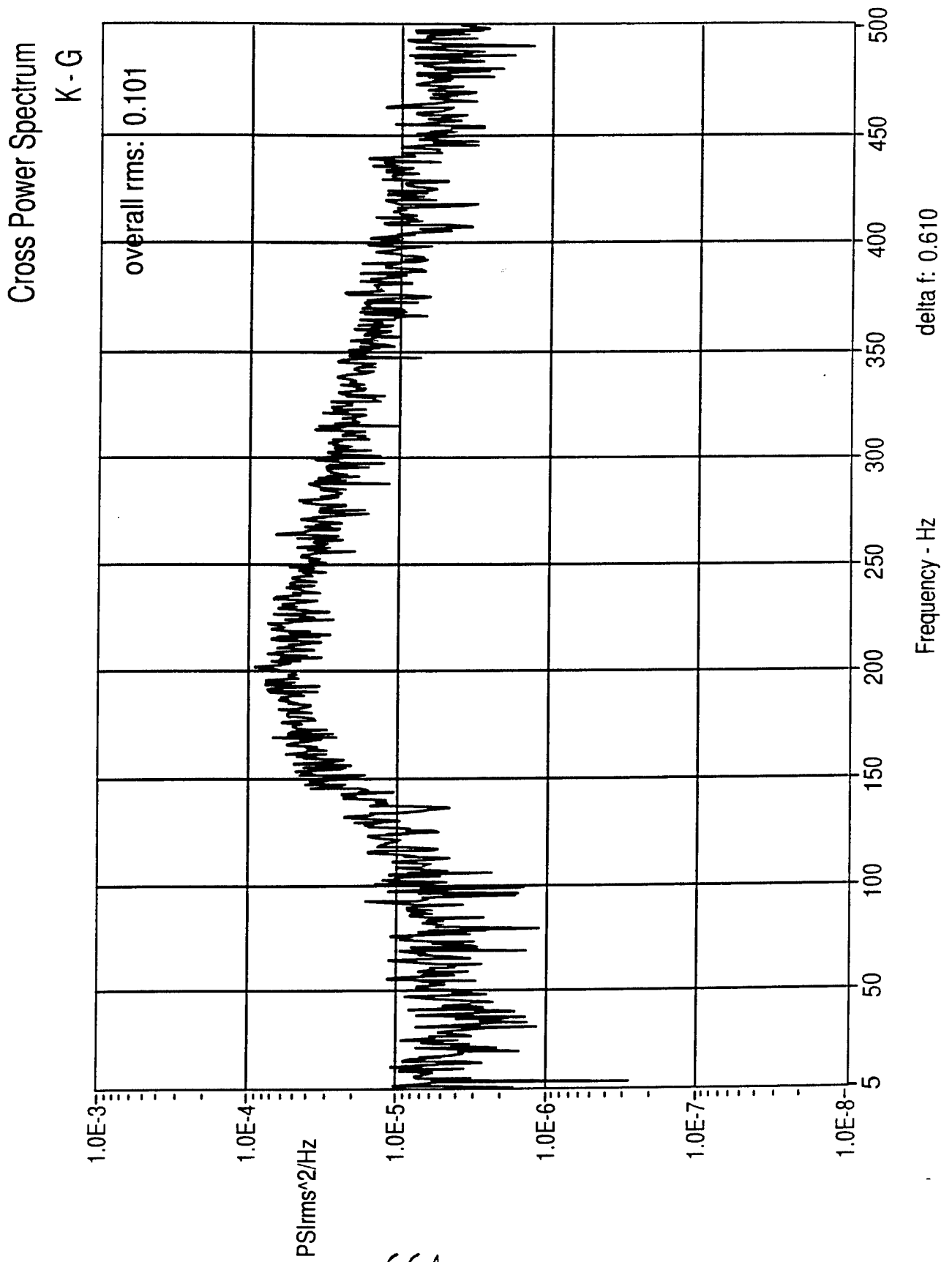
F-15 TPN\_3339: alpha=20 beta=0 bp=45

# Cross Power Spectrum

K - G



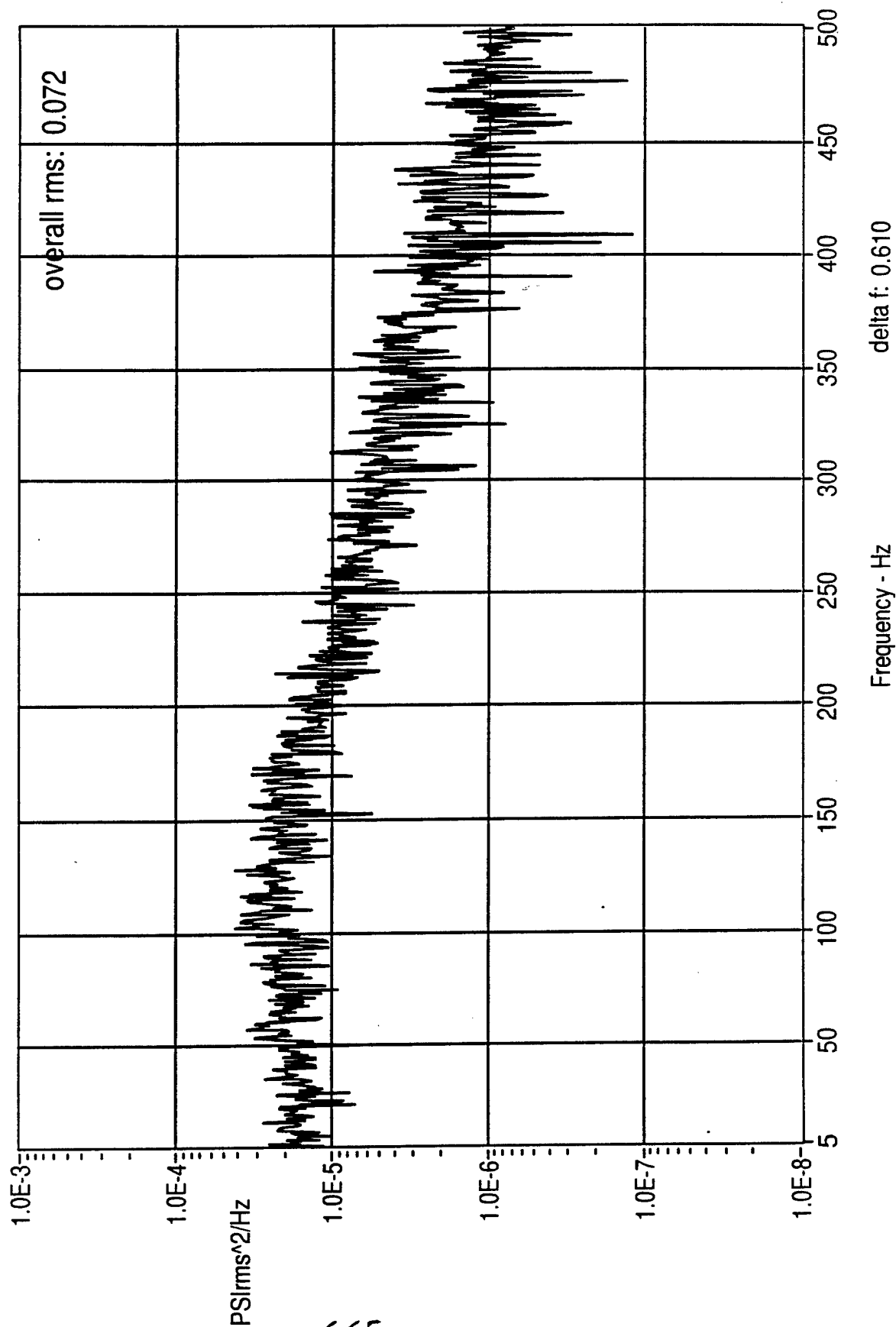
F-15 TPN\_3341:alpha=24 beta=0 bp=45



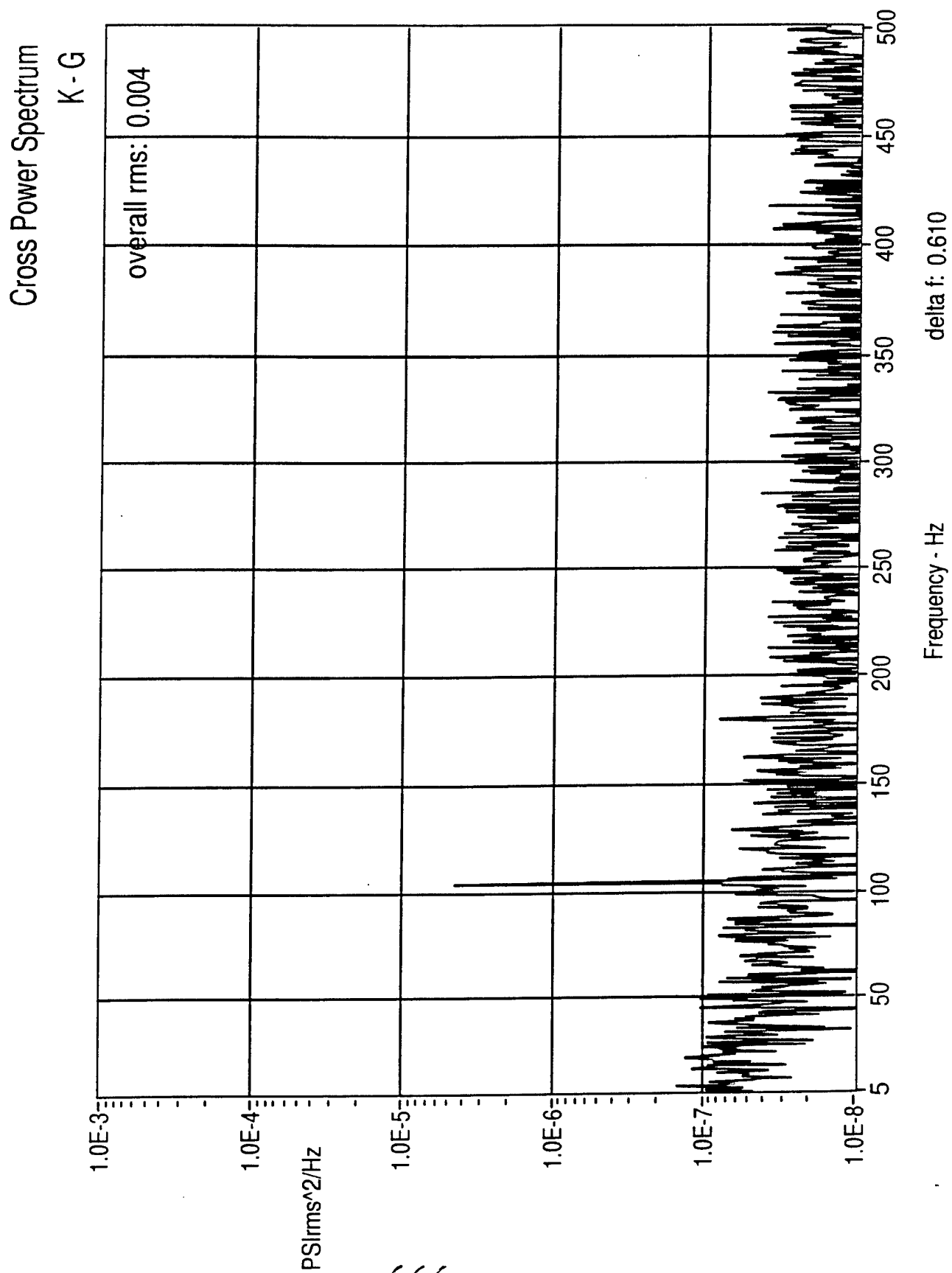
F-15 TPN\_3343: alpha=32 beta=0 bp=45

# Cross Power Spectrum

K - G



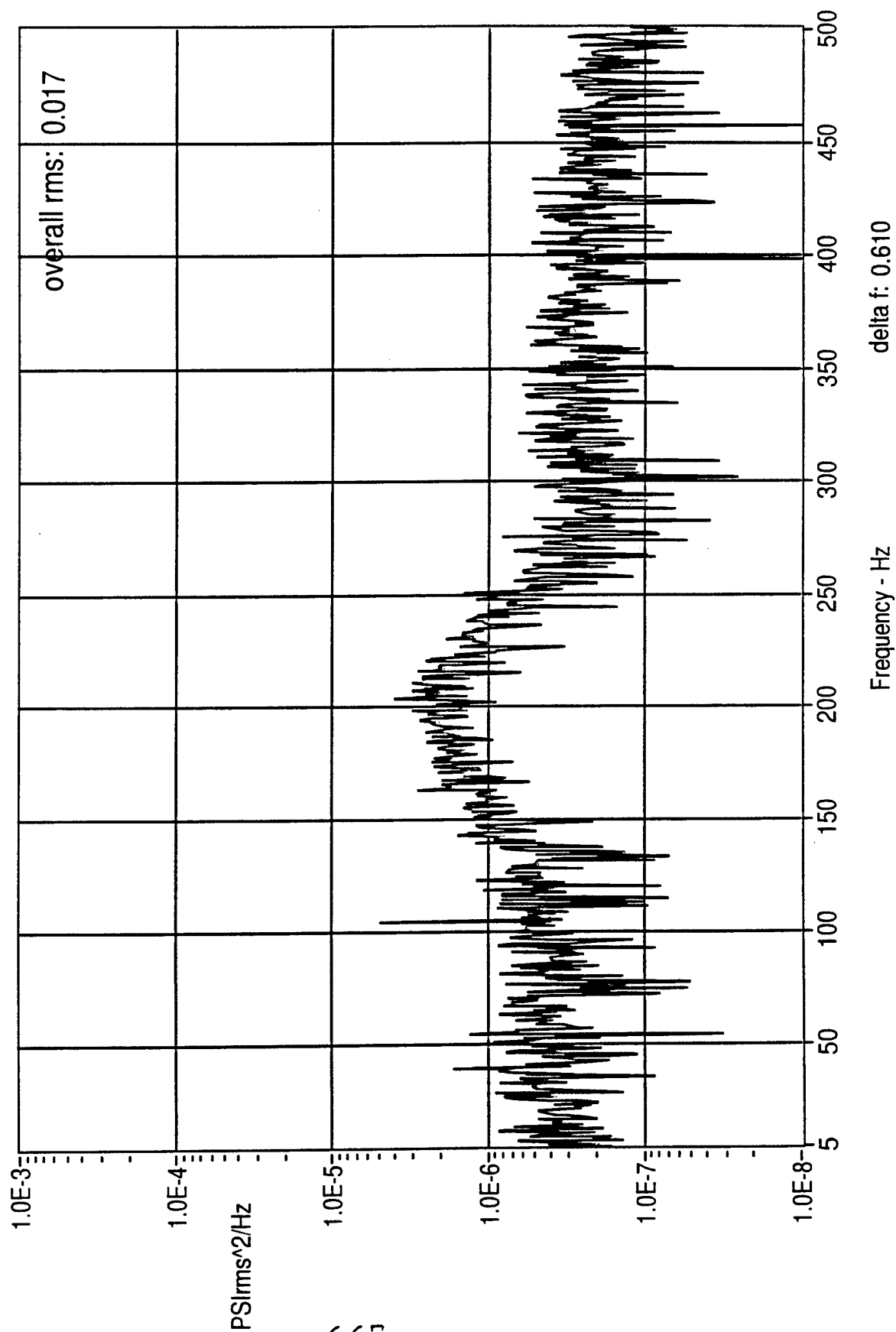
F-15 TPN\_3369: alpha=8 beta=-4 bp=45



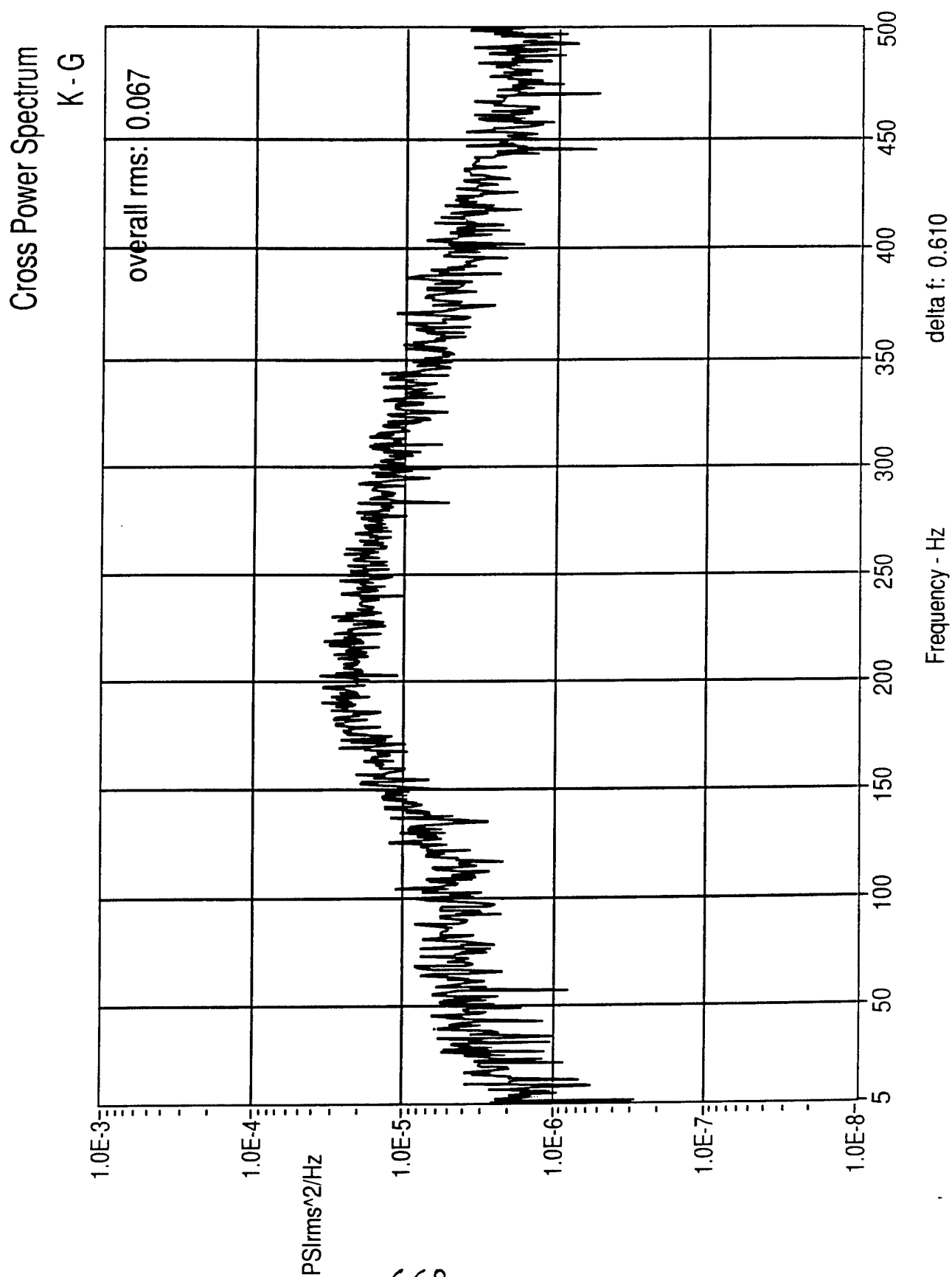
F-15 TPN\_3375: alpha=20 beta=-4 bp=45

# Cross Power Spectrum

K - G



F-15 TPN\_3377: alpha=24 beta=-4 bp=45

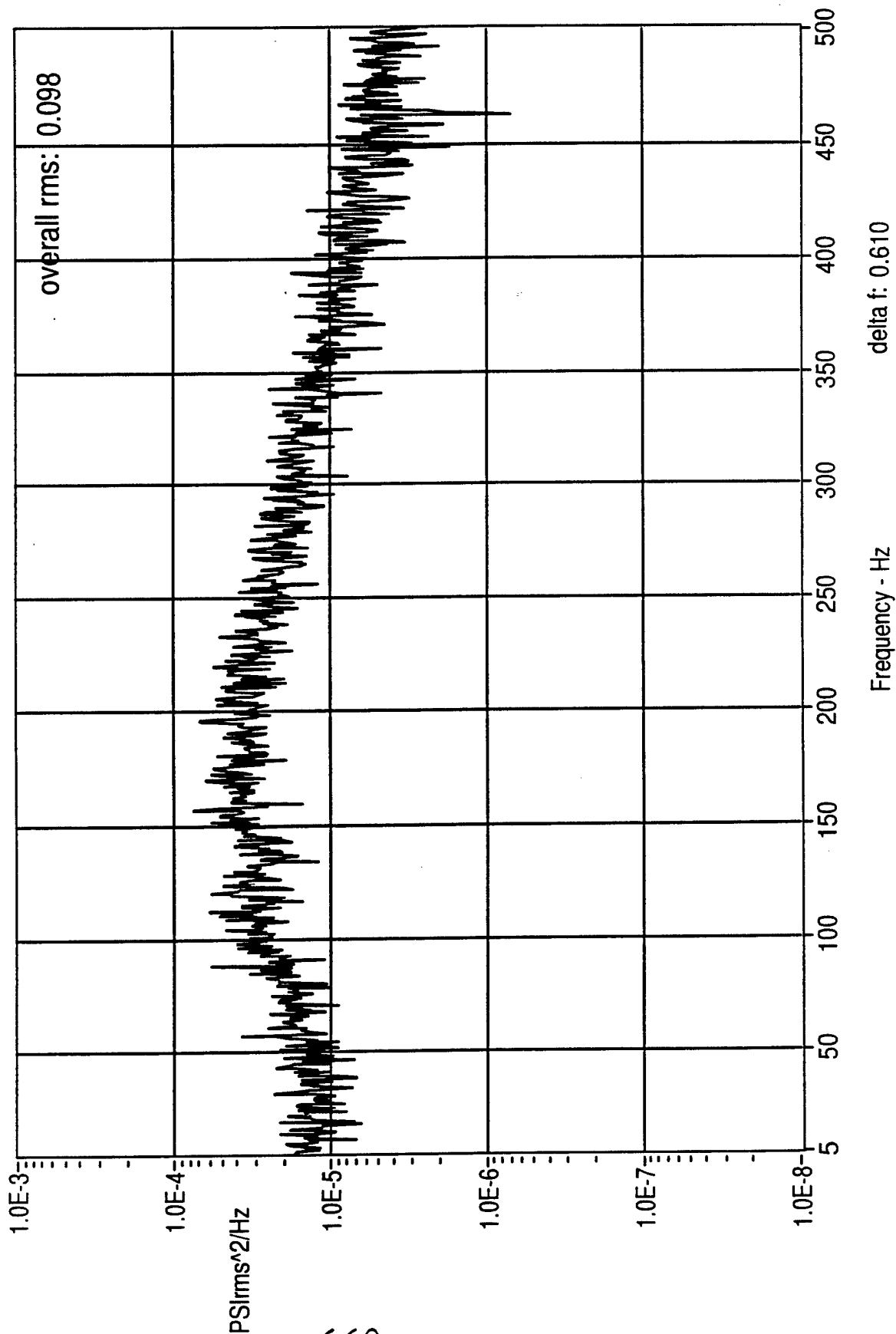




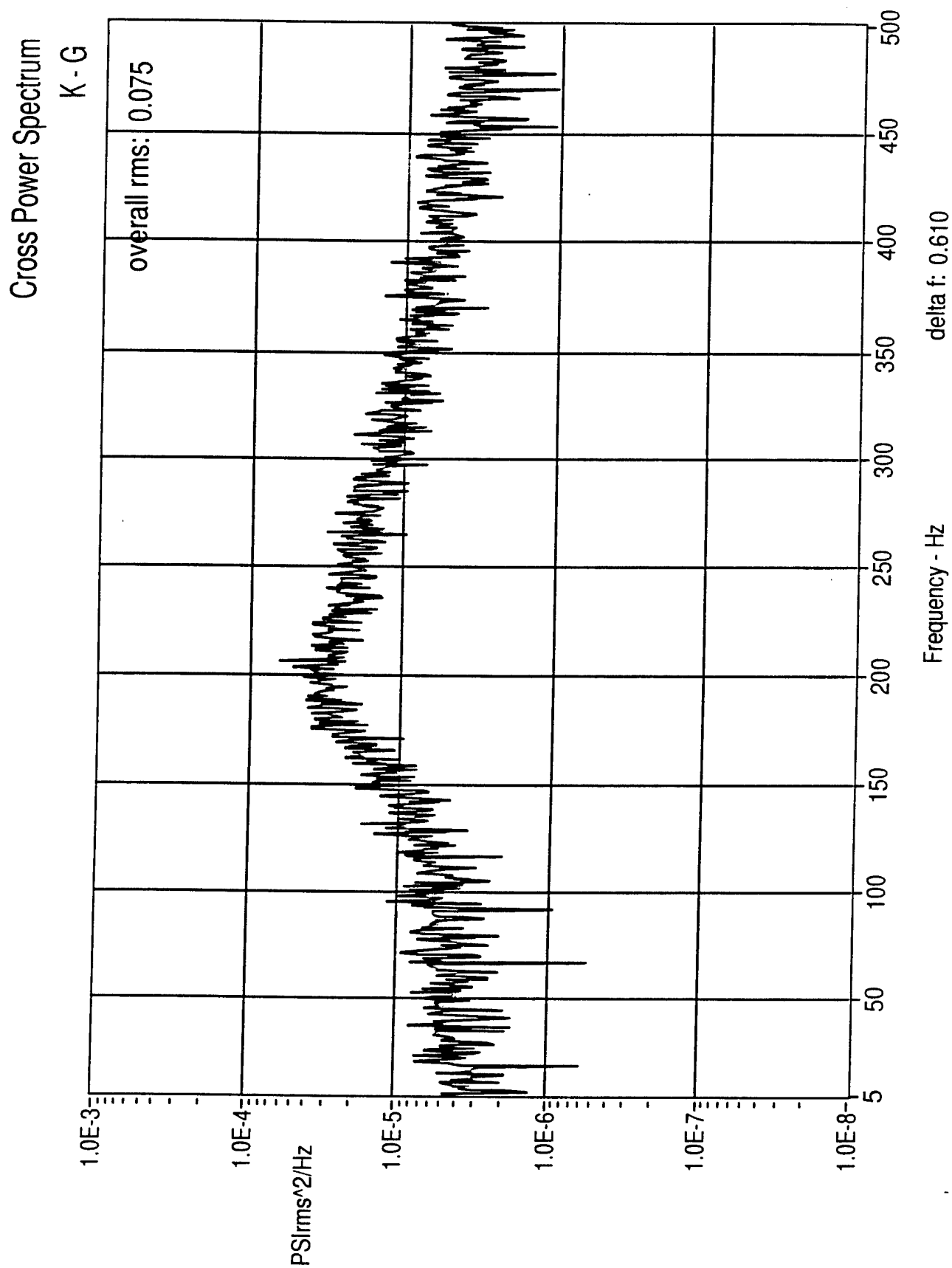
F-15 TPN\_3379: alpha=32 beta=-4 bp=45

# Cross Power Spectrum

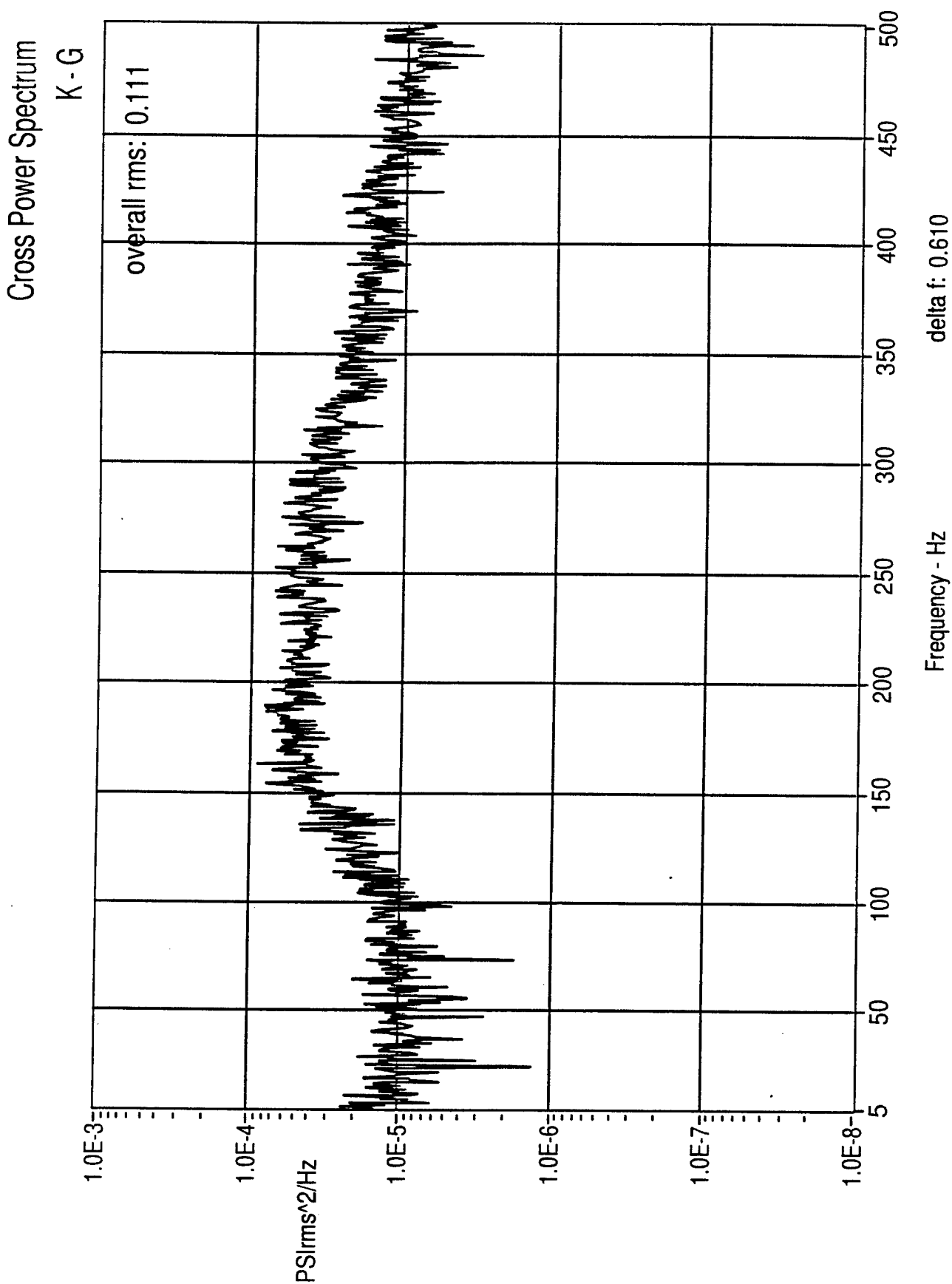
K - G



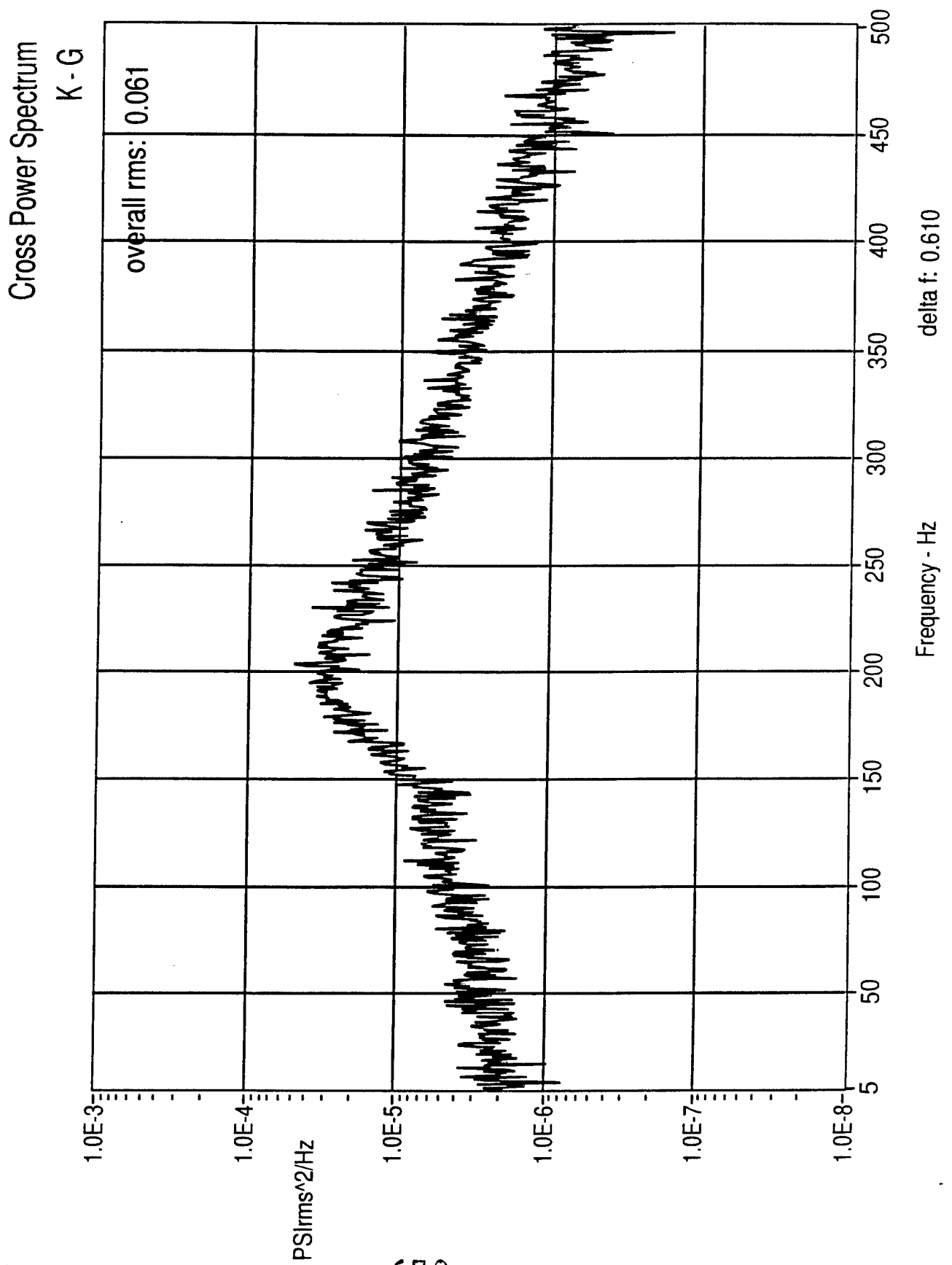
F-15 TPN\_3046: alpha=20 beta=4 bp=65



F-15 TPN\_3048: alpha=24 beta=4 bp=65



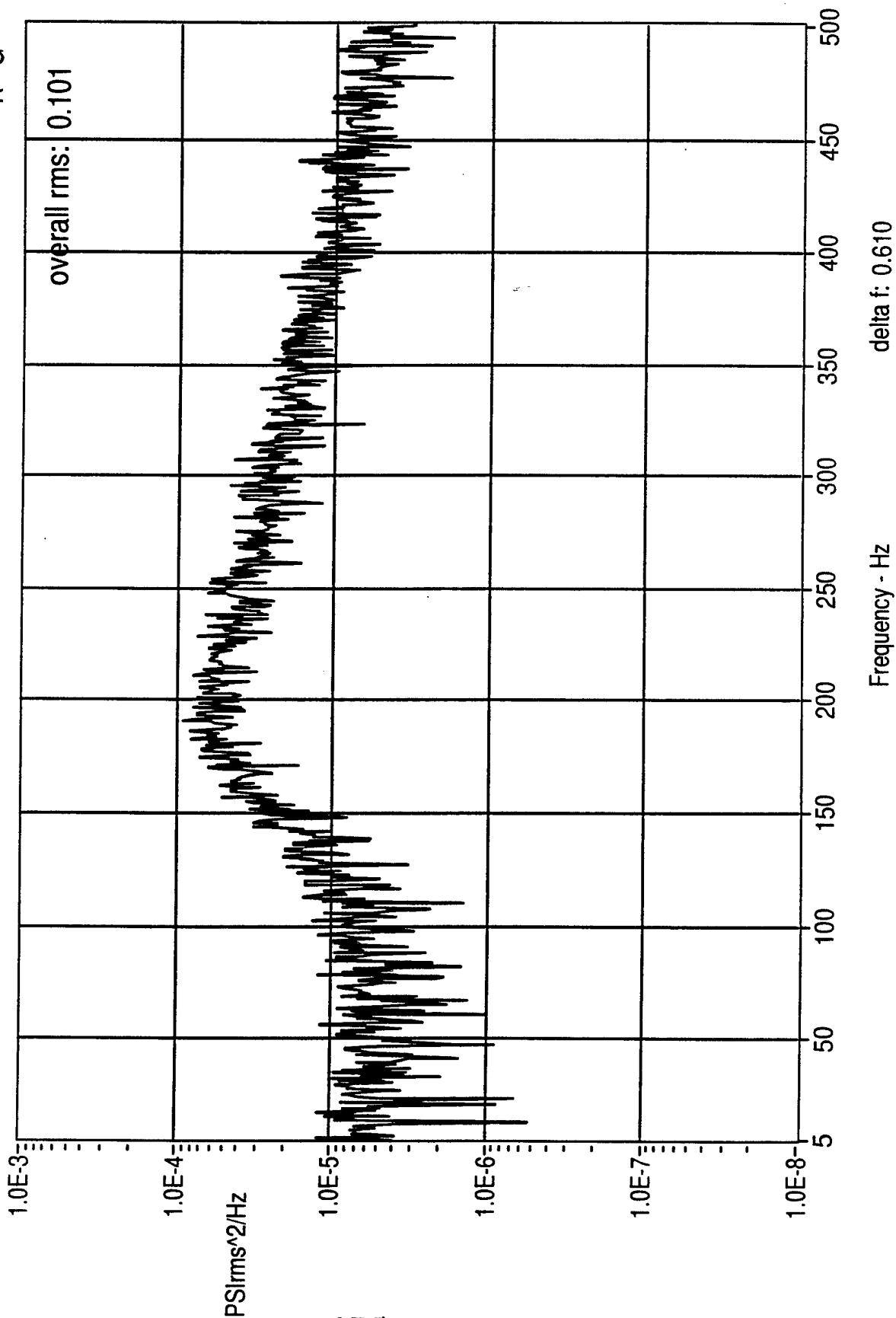
F-15 TPN\_3040: alpha=20 beta=0 bp=65



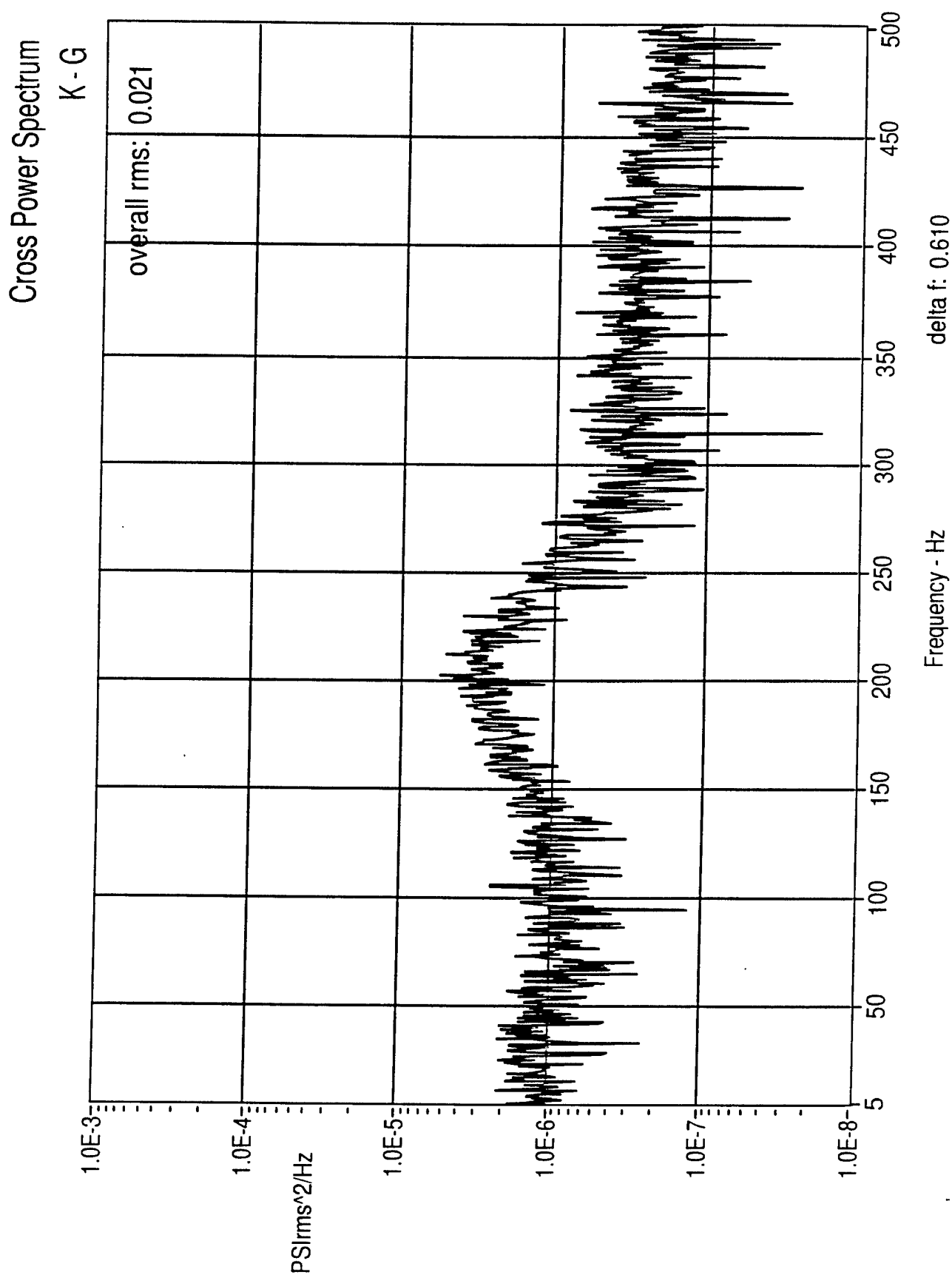
F-15 TPN\_3042: alpha=24 beta=0 bp=65

# Cross Power Spectrum

K - G



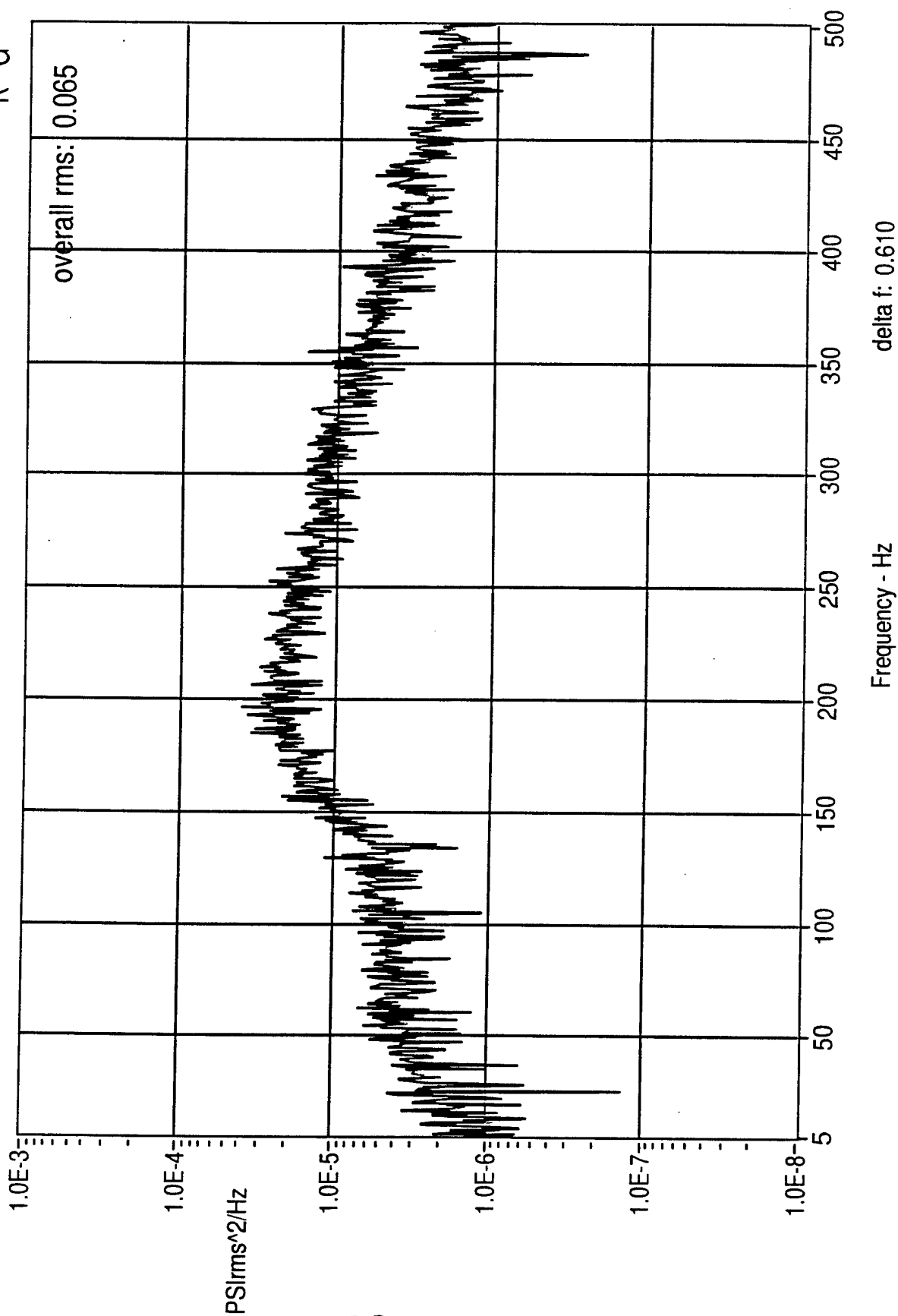
F-15 TPN\_3034: alpha=20 beta=-4 bp=65



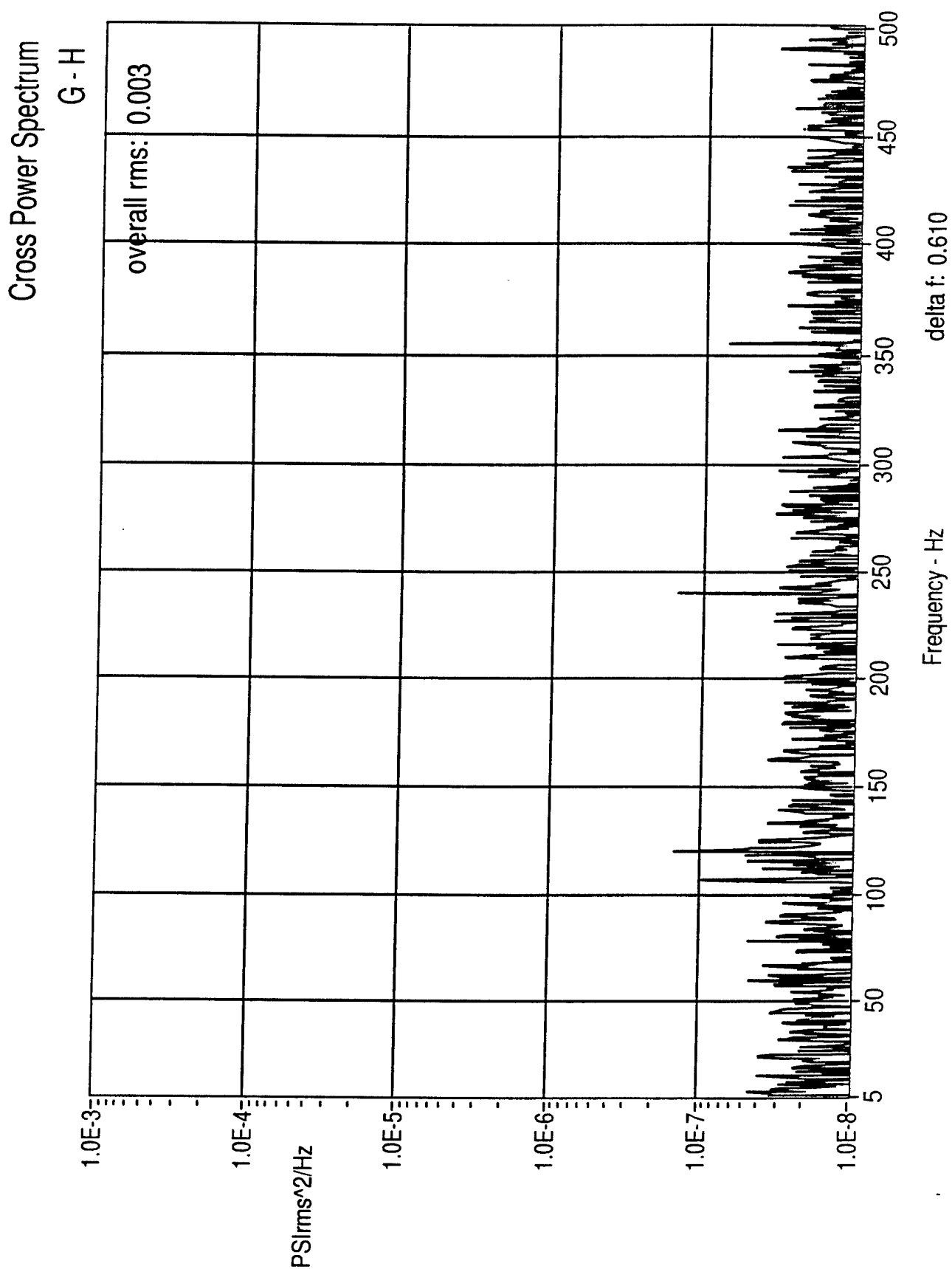
F-15 TPN\_3036: alpha=24 beta=-4 bp=65

# Cross Power Spectrum

K - G

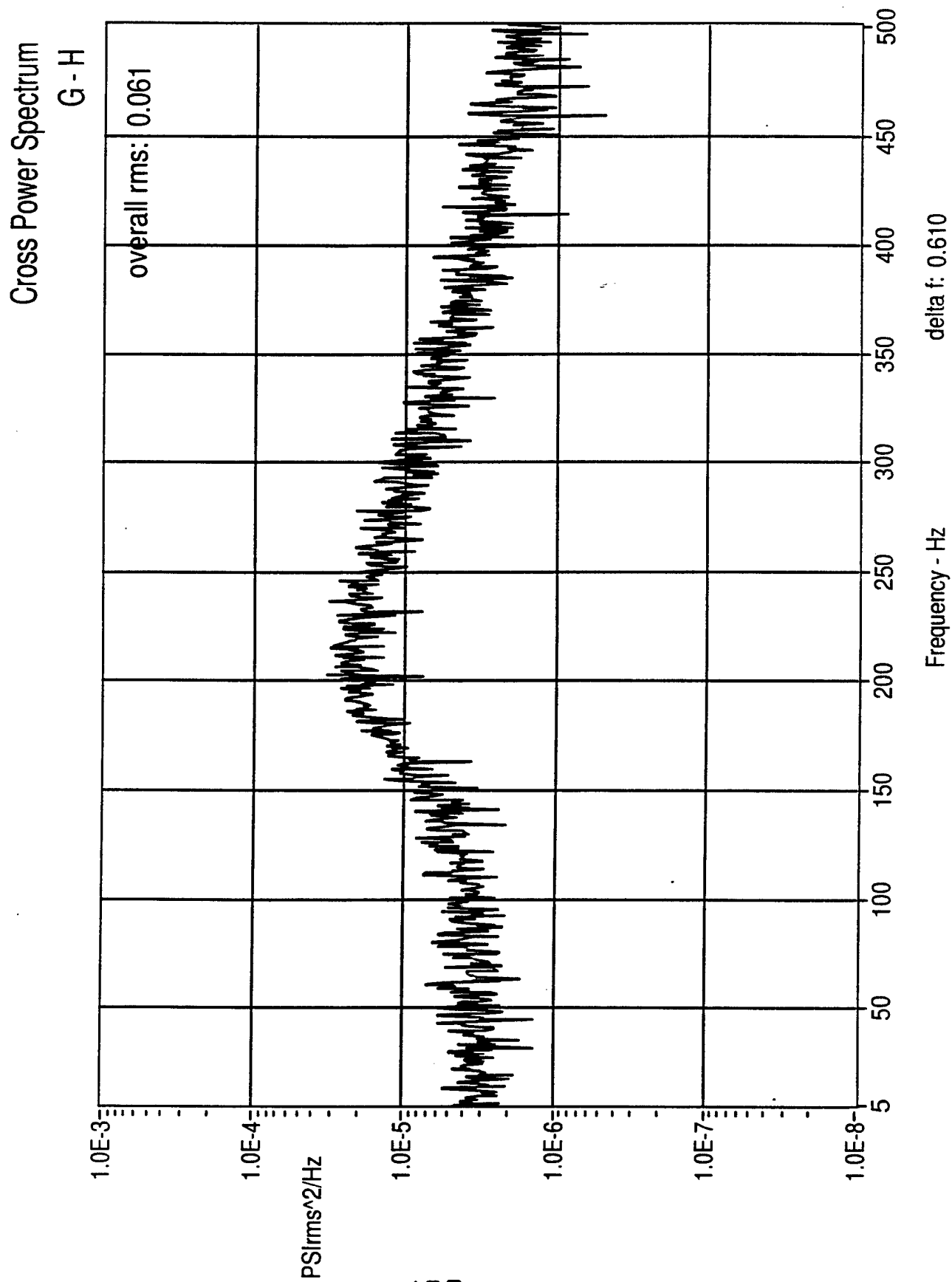


F-15 TPN\_2918: alpha=8 beta=4 bp=0

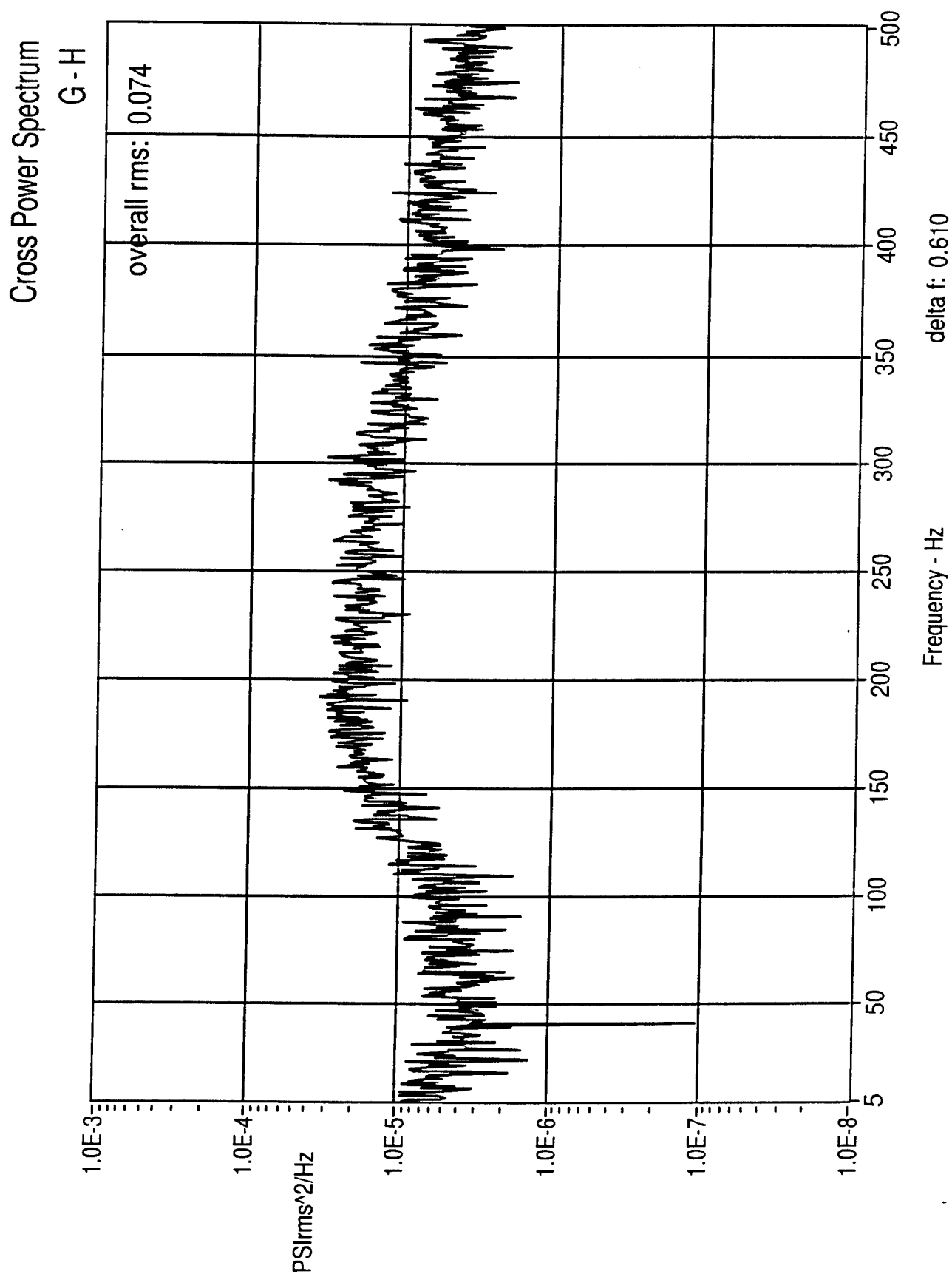




F-15 TPN\_2924: alpha=20 beta=4 bp=0



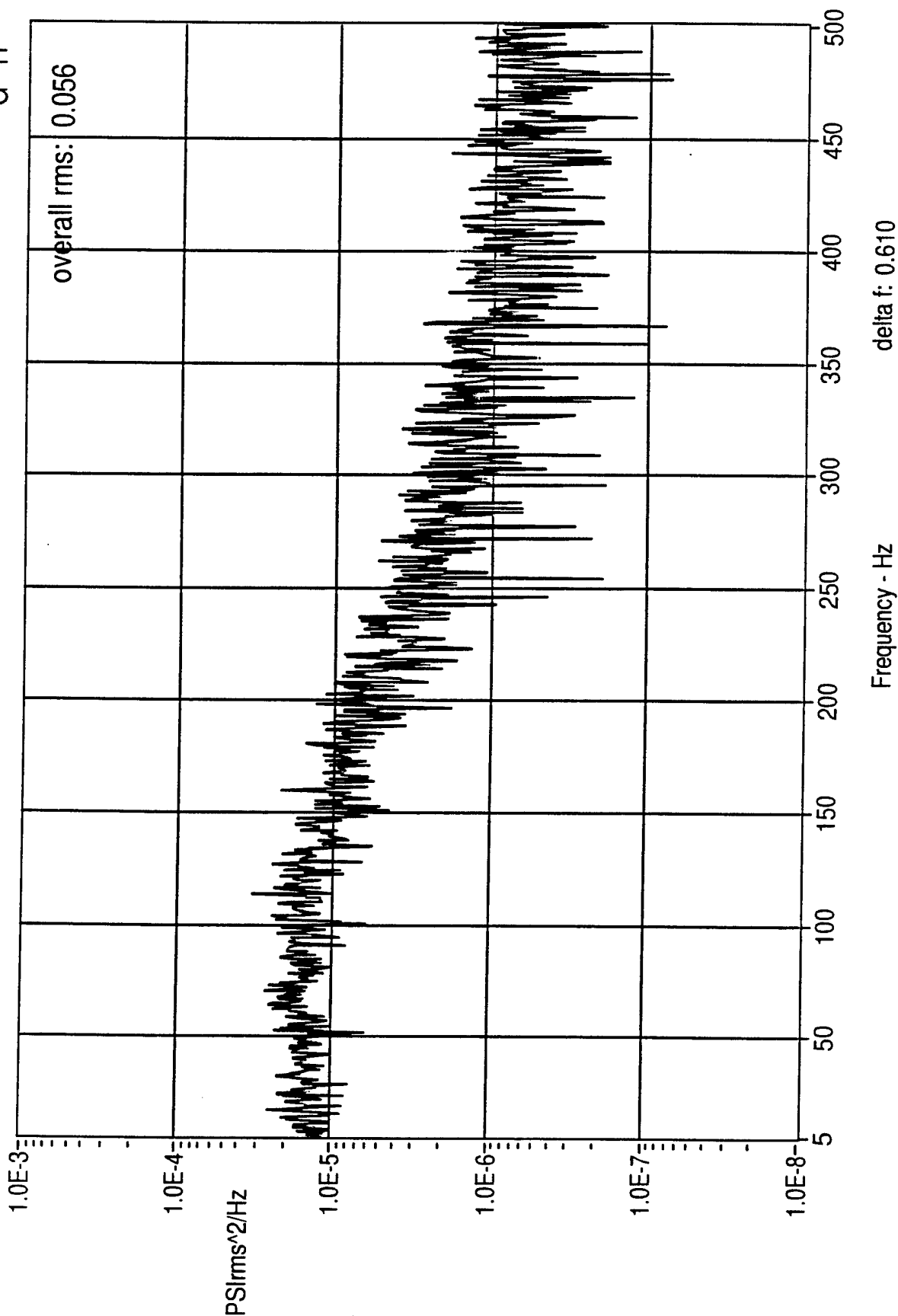
F-15 TPN\_2926: alpha=24 beta=4 bp=0



F-15 TPN\_2928:alpha=32 beta=4 bp=0

# Cross Power Spectrum

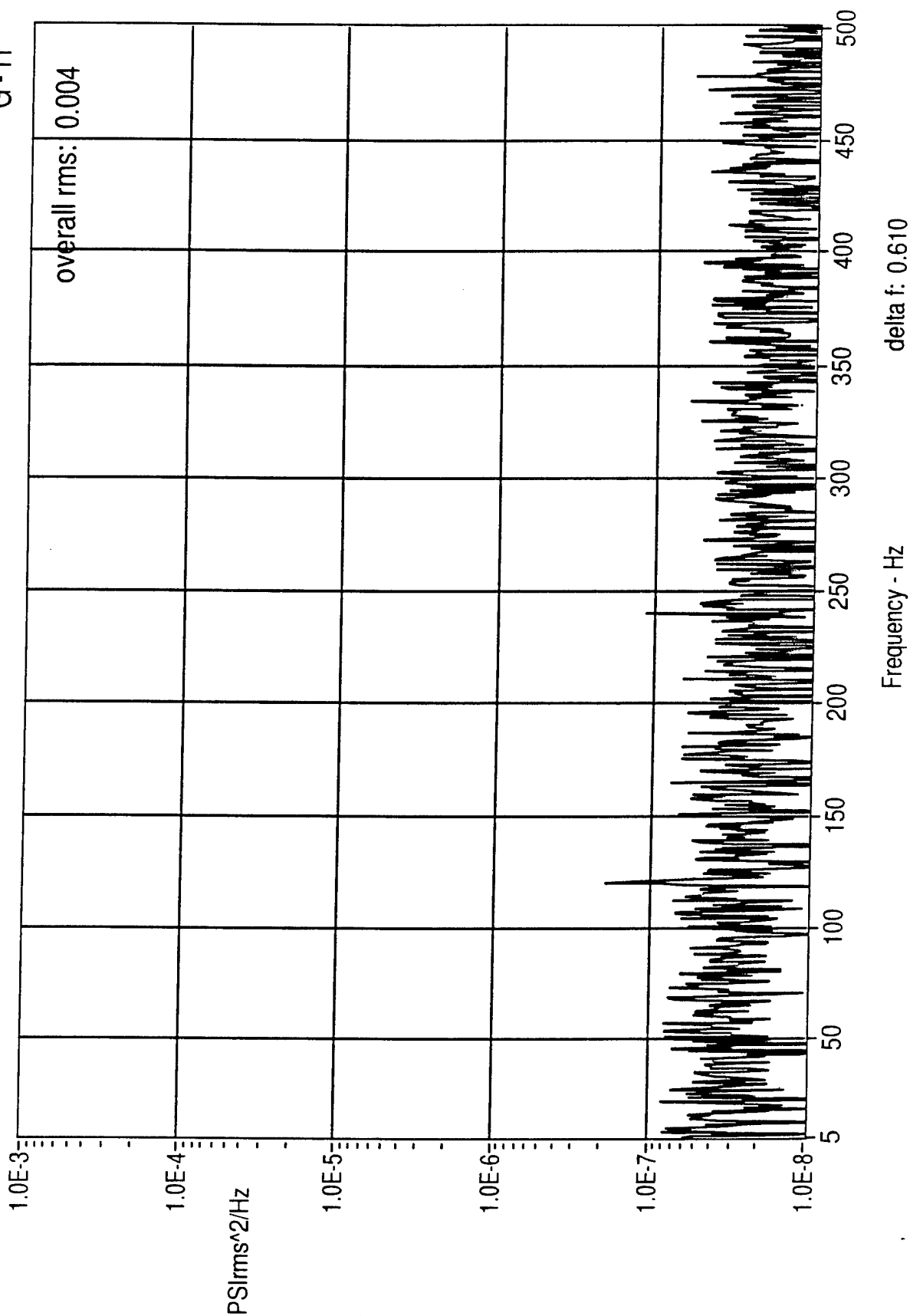
G - H



F-15 TPN\_2844: alpha=8 beta=0 bp=0

# Cross Power Spectrum

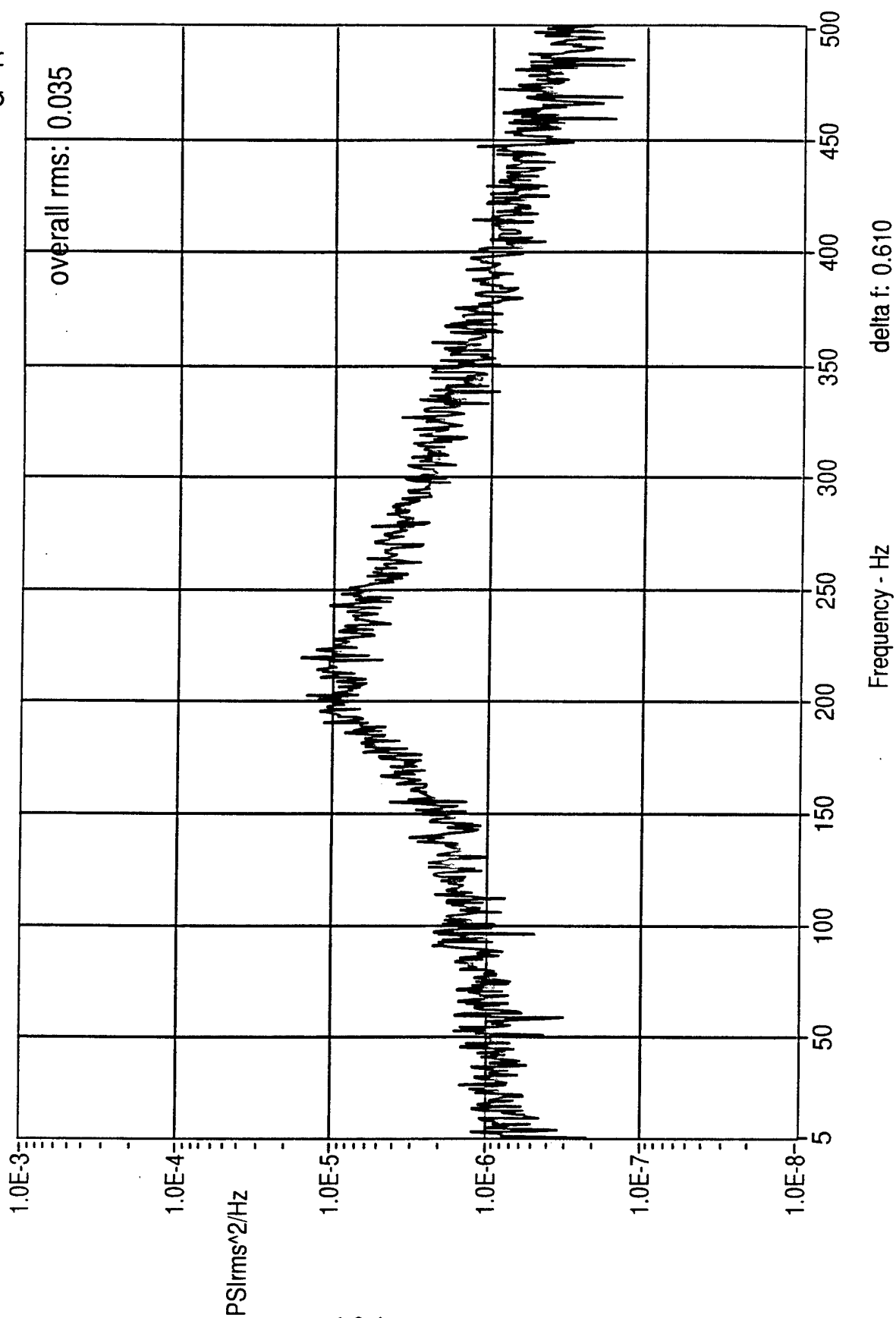
G - H



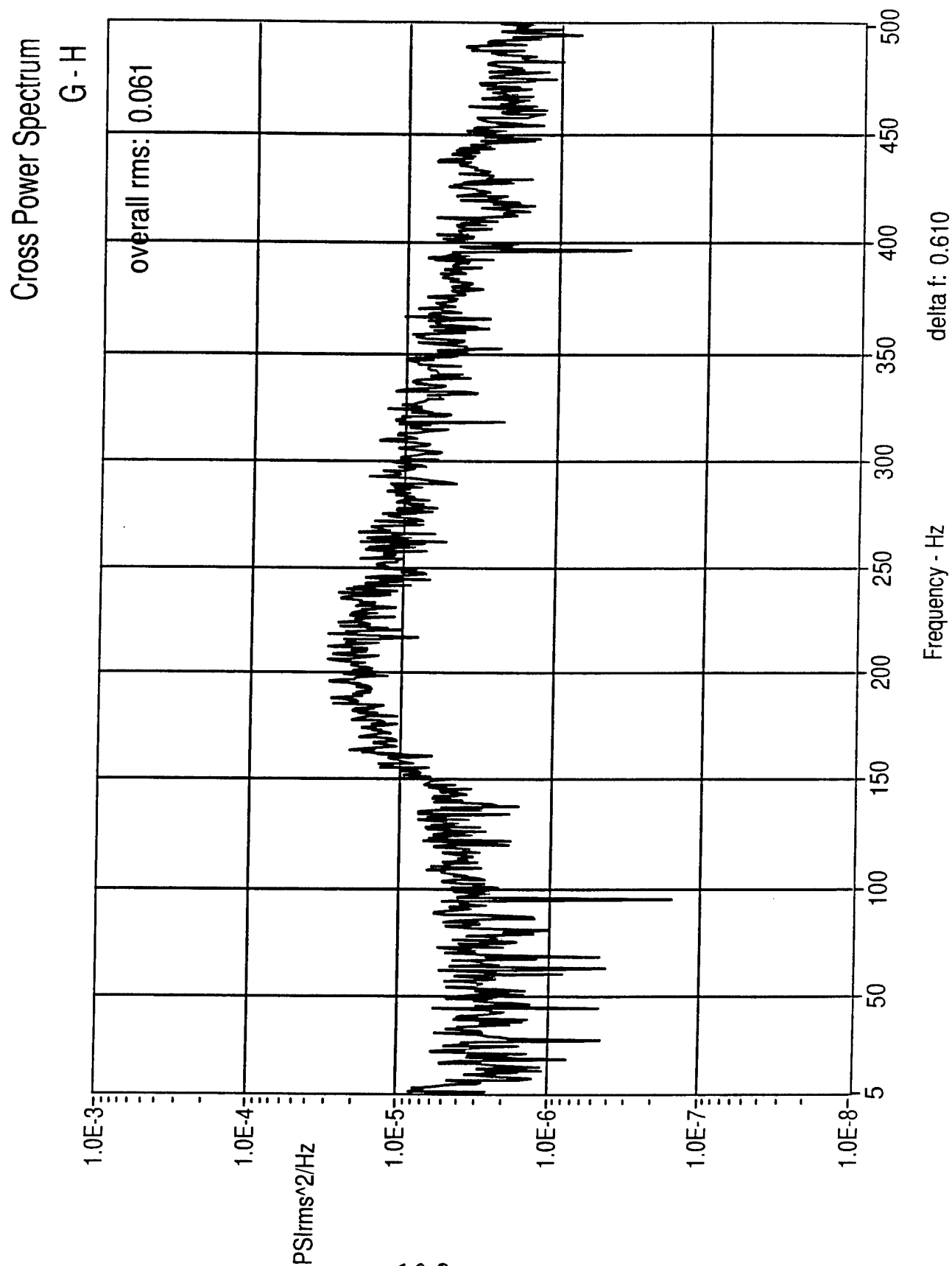
F-15 TPN\_2850: alpha=20 beta=0 bp=0

# Cross Power Spectrum

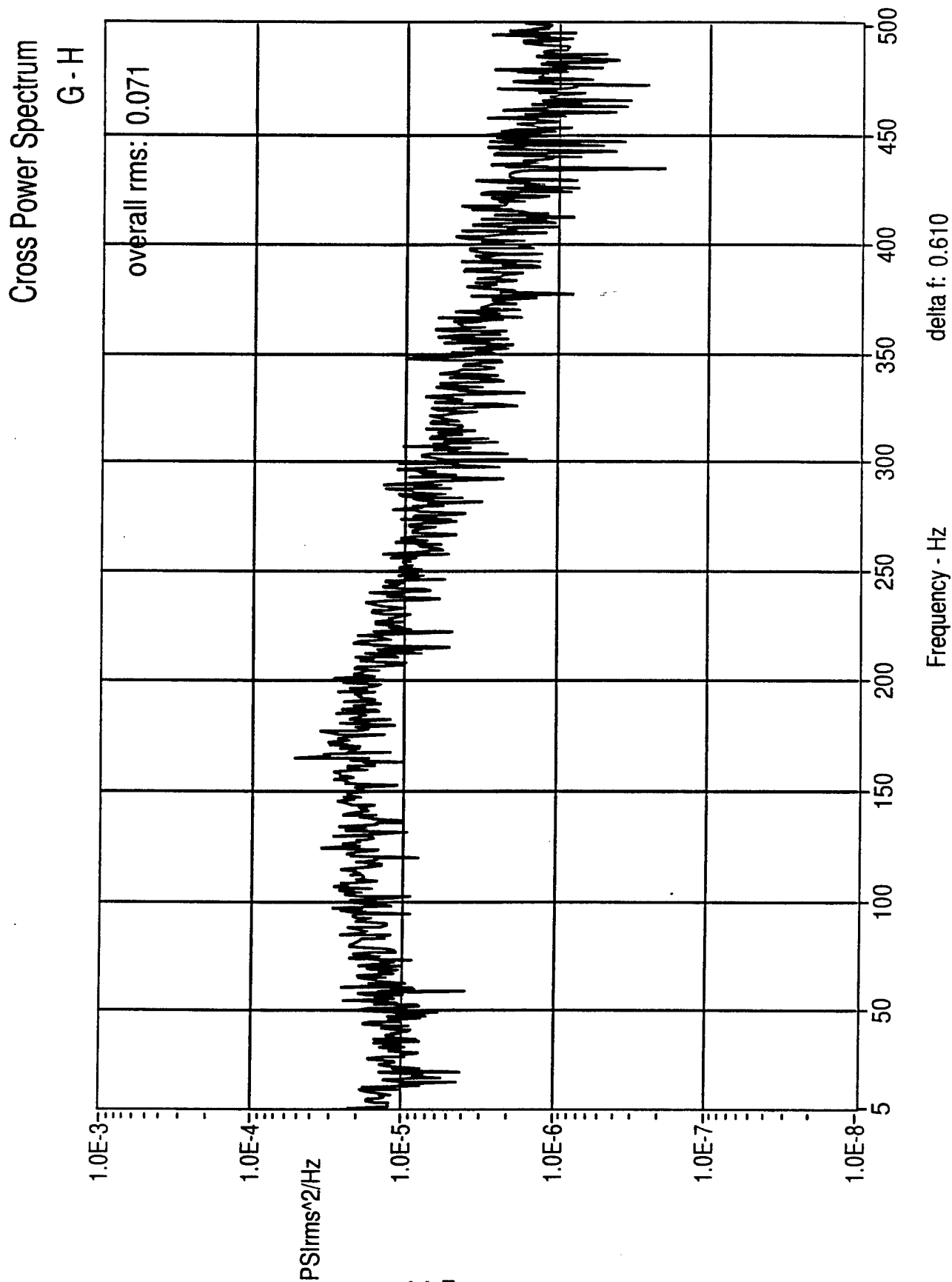
G - H



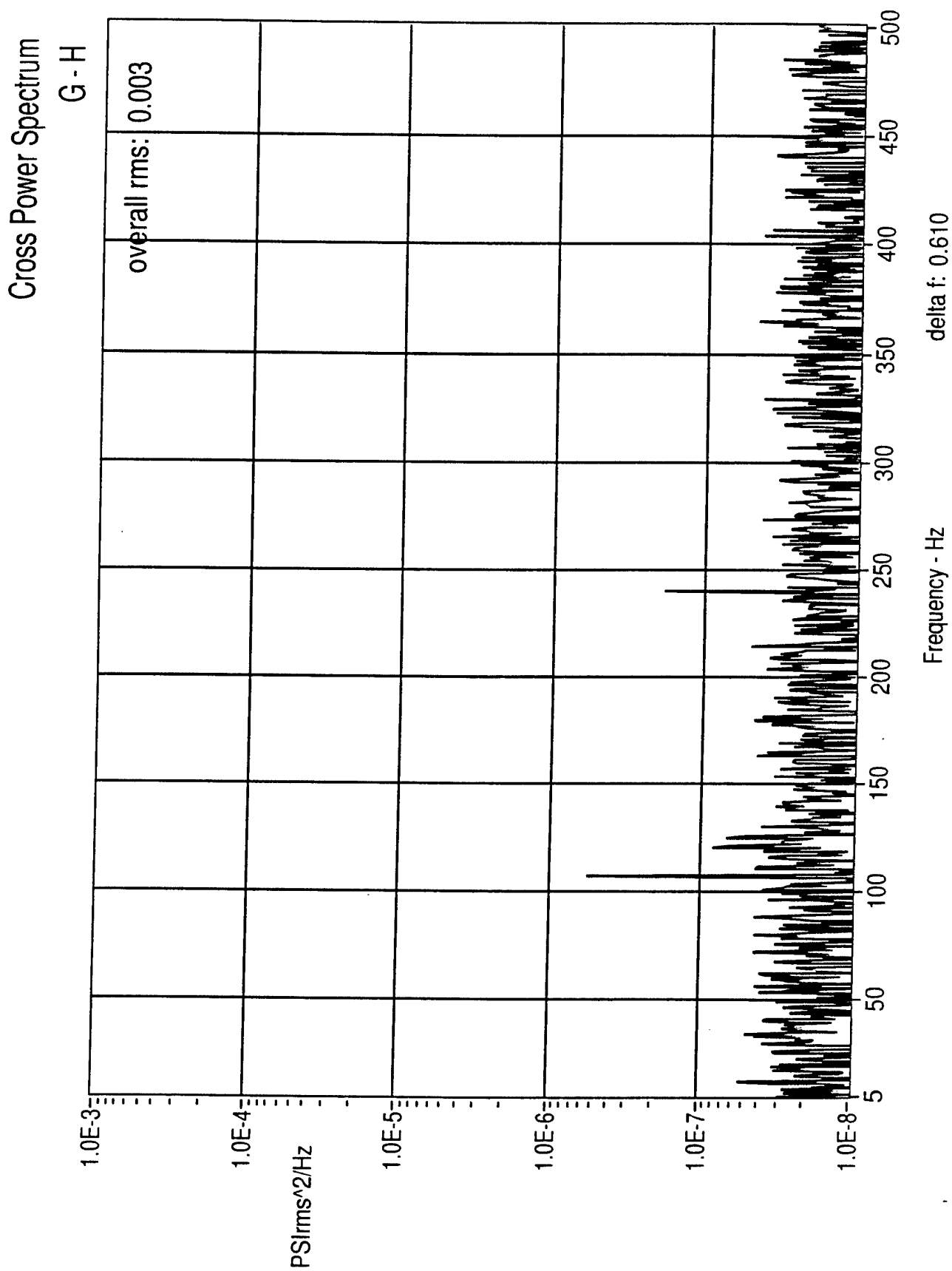
F-15 TPN\_2852: alpha=24 beta=0 bp=0



F-15 TPN\_2854: alpha=32 beta=0 bp=0



F-15 TPN\_2864: alpha=8 beta=-4 bp=0

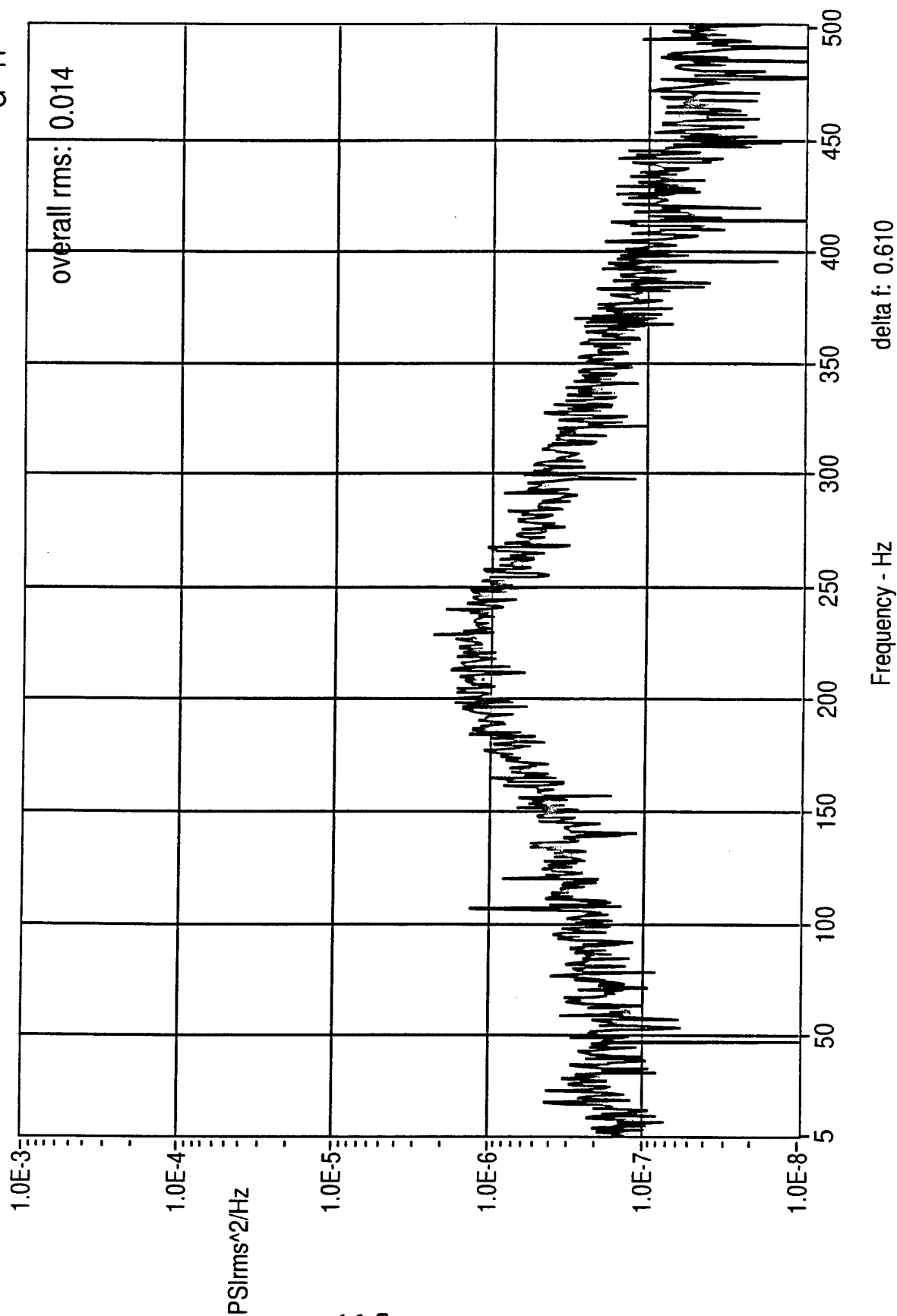




F-15 TPN\_2870: alpha=20 beta=-4 bp=0

# Cross Power Spectrum

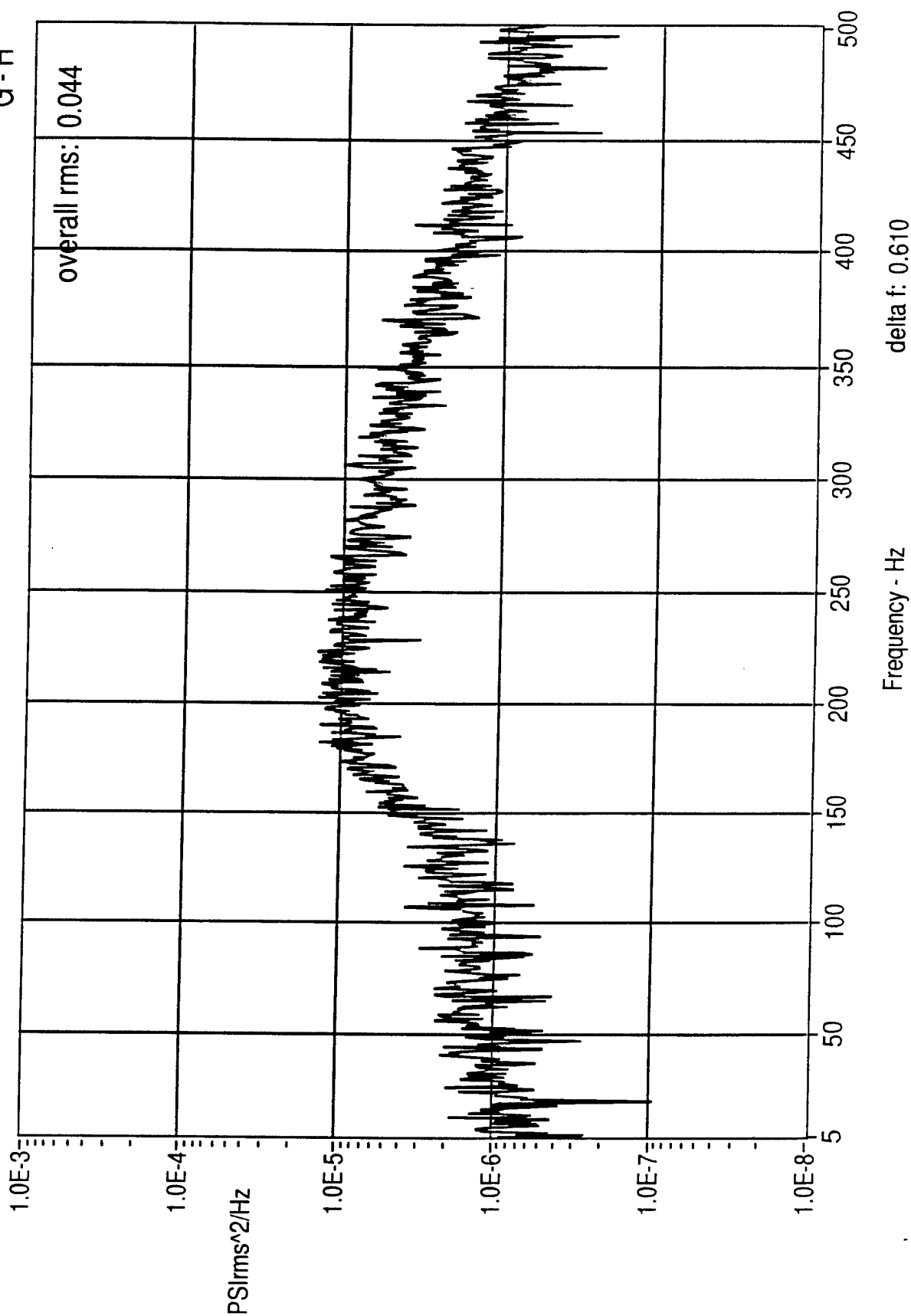
G - H



F-15 TPN\_2872: alpha=24 beta=-4 bp=0

# Cross Power Spectrum

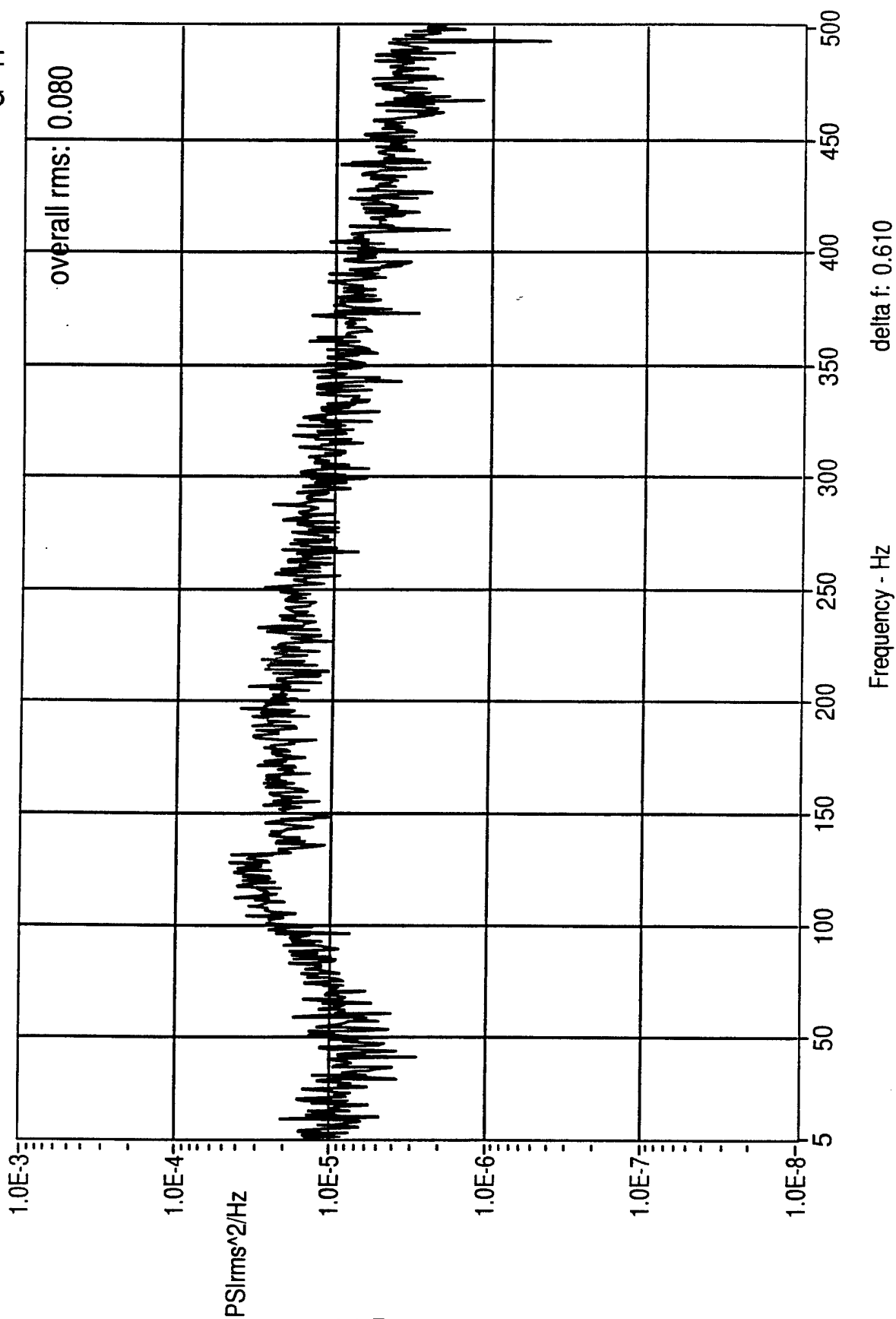
G - H



F-15 TPN\_2874: alpha=32 beta=-4 bp=0

# Cross Power Spectrum

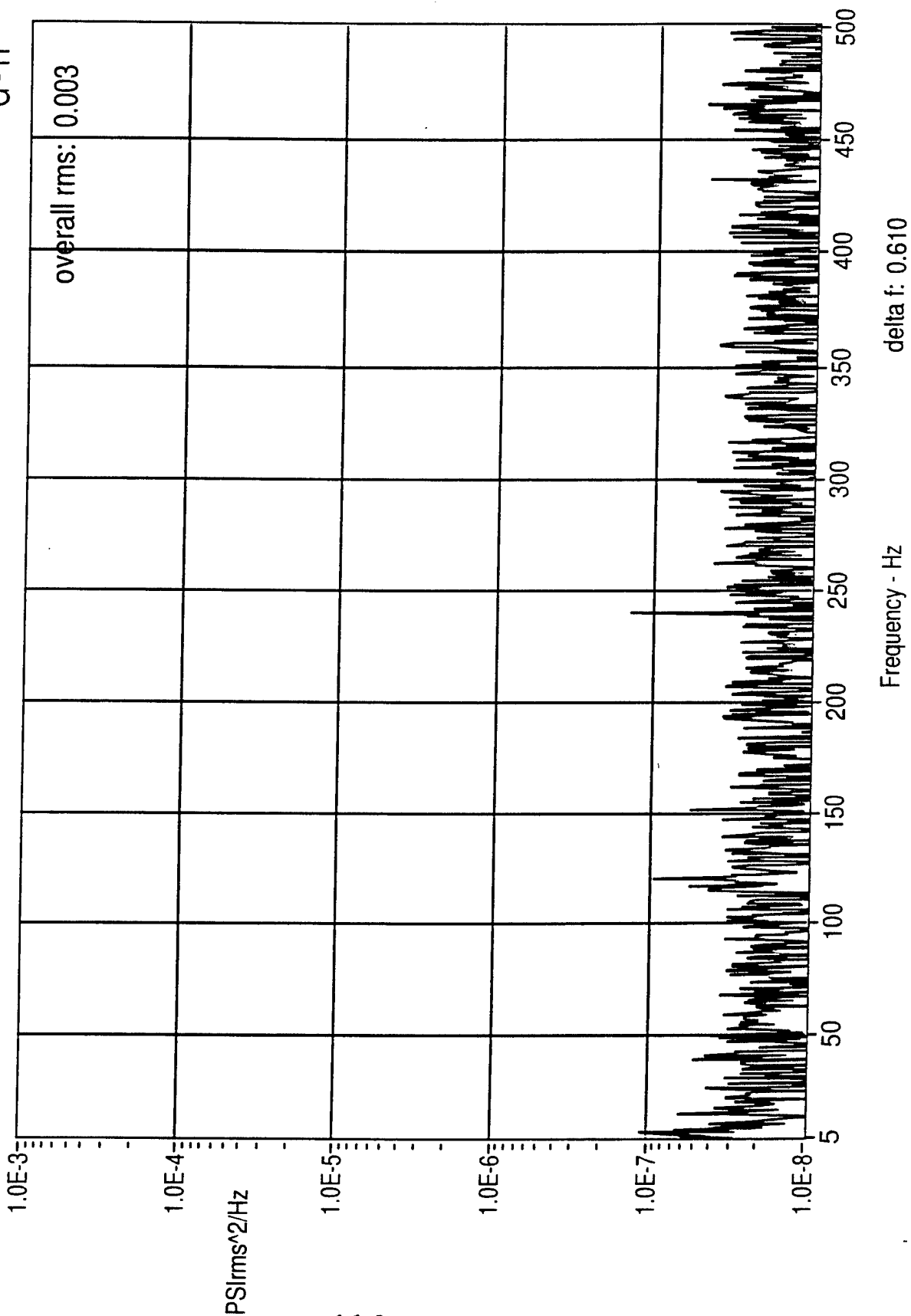
G - H



F-15 TPN\_3351: alpha=8 beta=4 bp=45

# Cross Power Spectrum

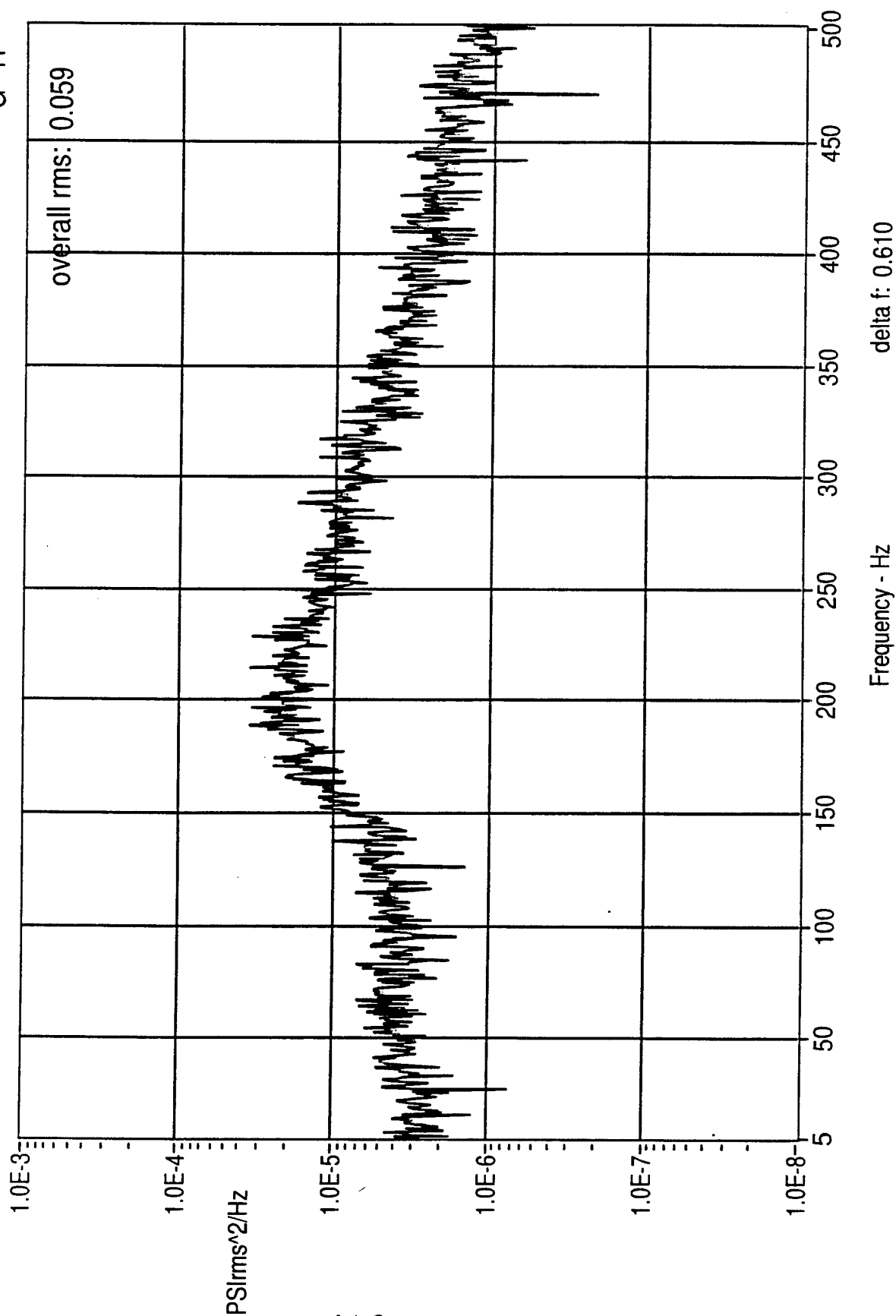
G - H



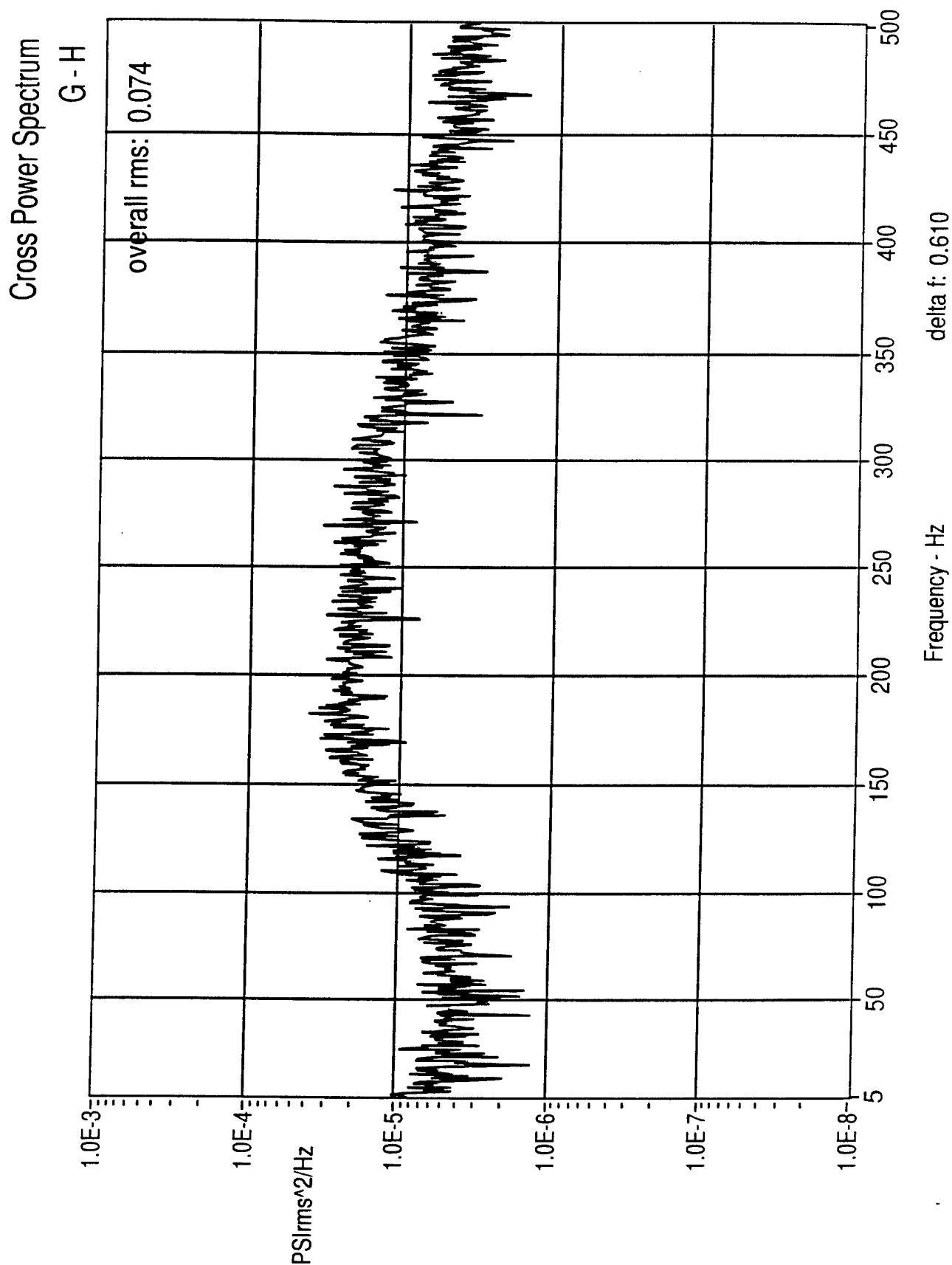
F-15 TPN\_3357: alpha=20 beta=4 bp=45

# Cross Power Spectrum

G - H



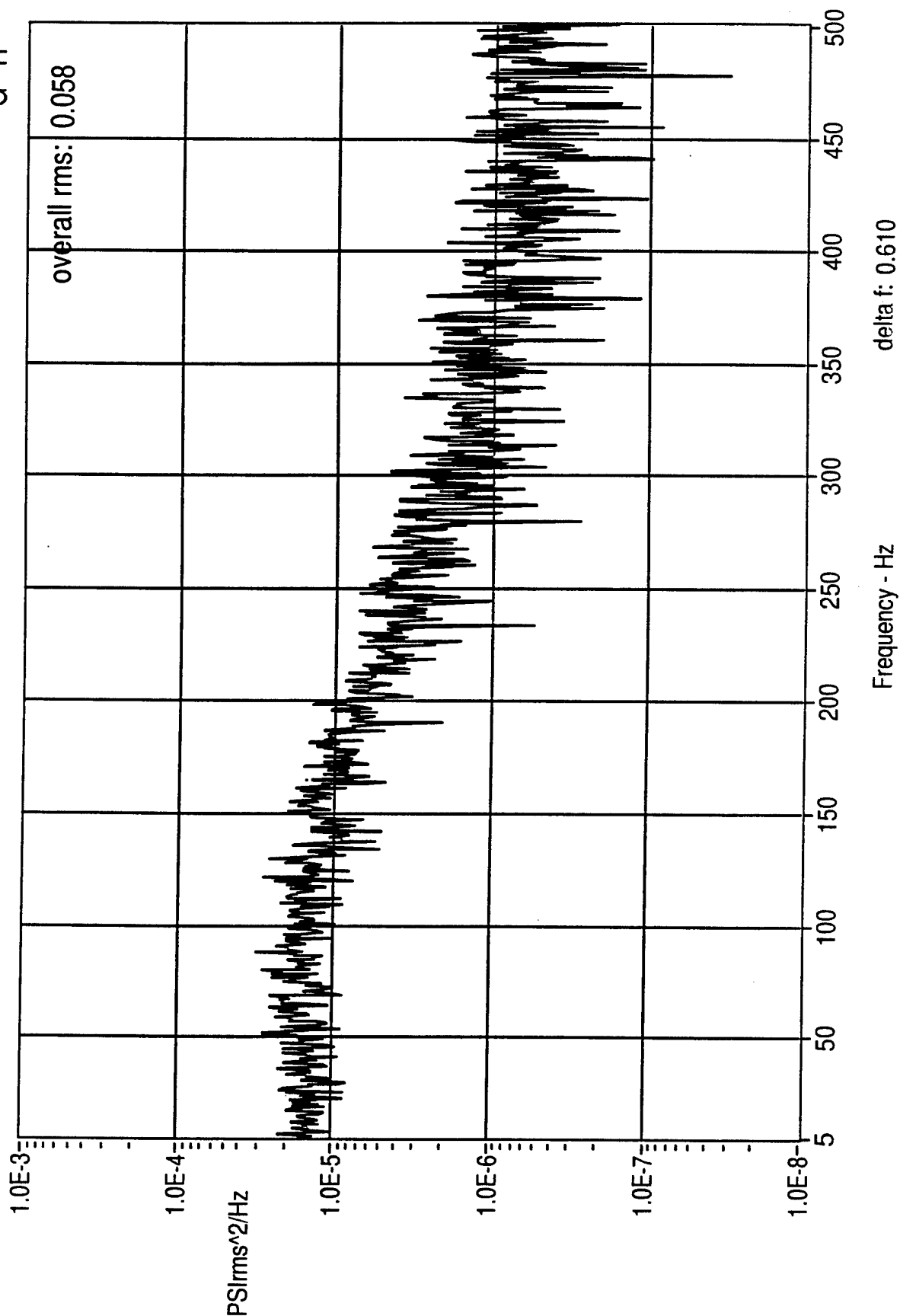
F-15 TPN\_3359: alpha=24 beta=4 bp=45



F-15 TPN\_3361: alpha=32 beta=4 bp=45

# Cross Power Spectrum

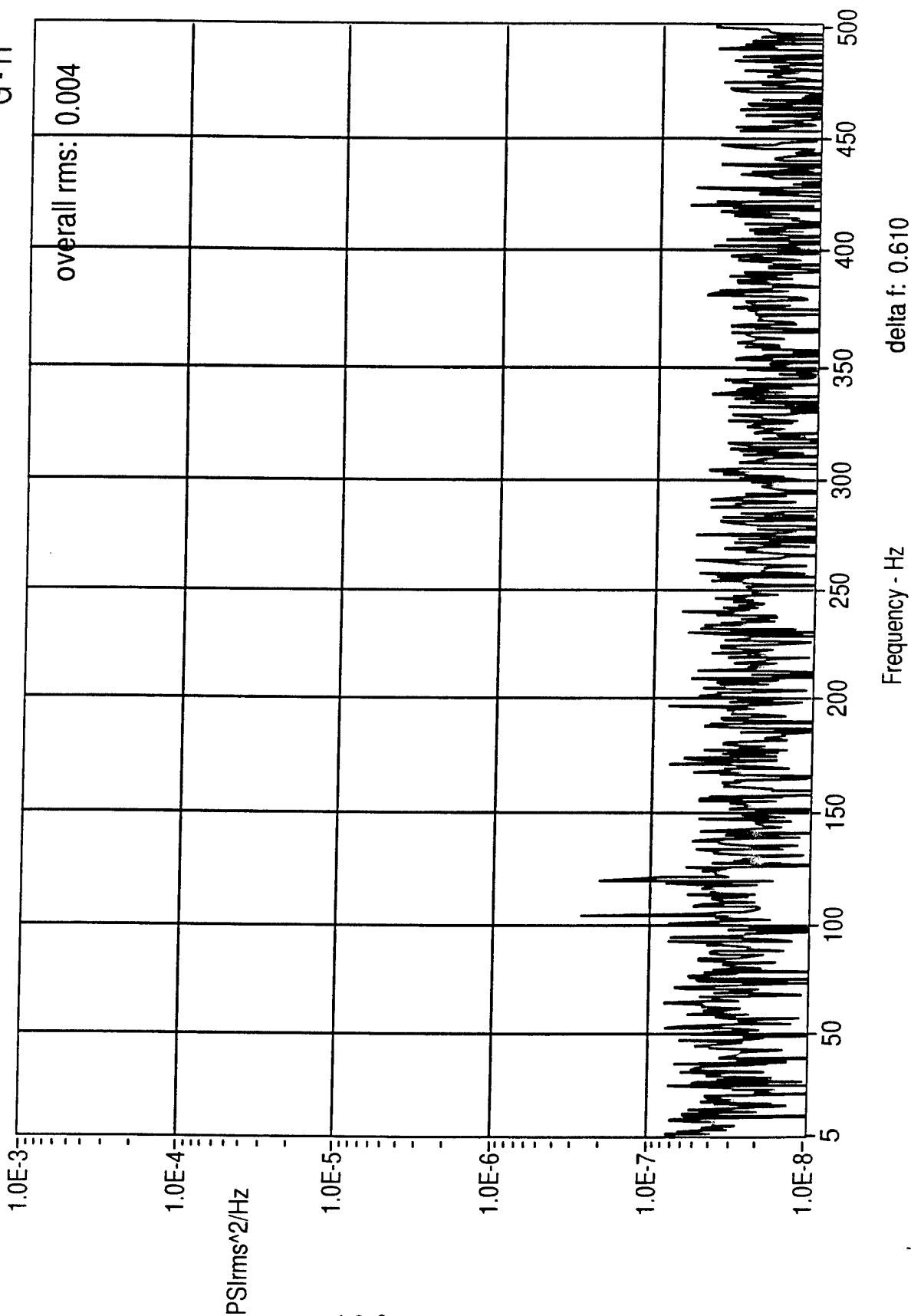
G - H



F-15 TPN\_3333: alpha=8 beta=0 bp=45

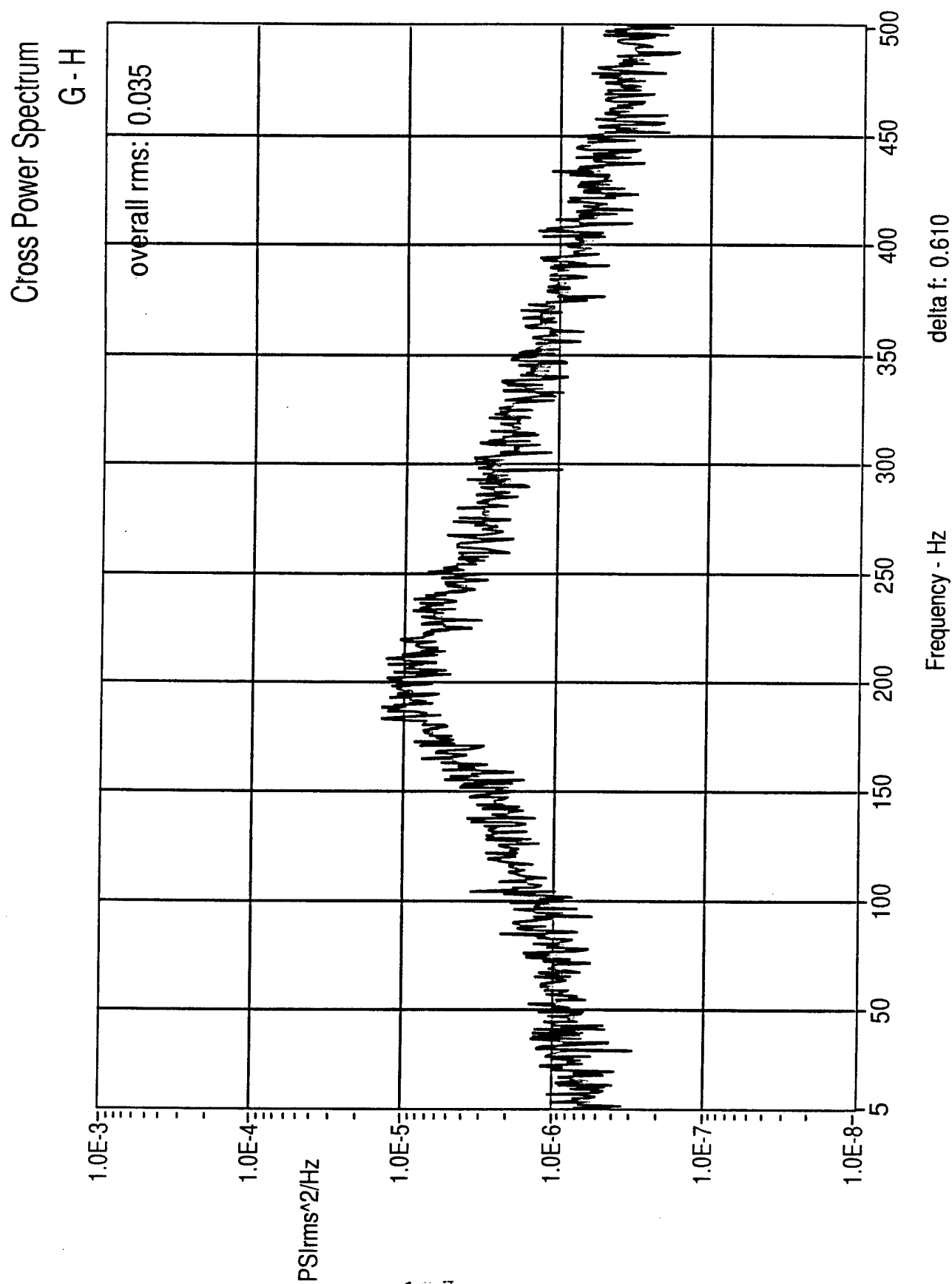
# Cross Power Spectrum

G - H





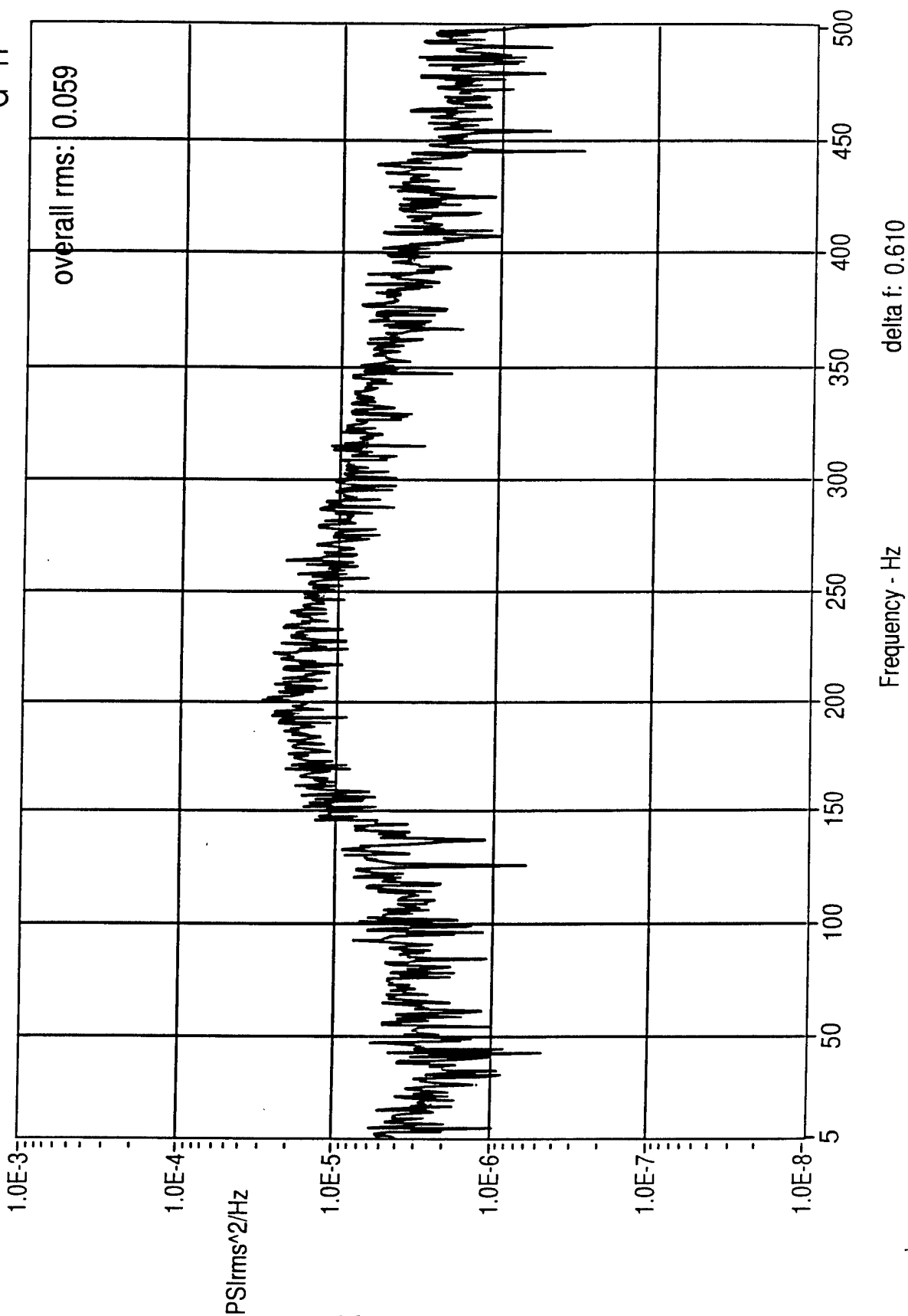
F-15 TPN\_3339: alpha=20 beta=0 bp=45



F-15 TPN\_3341: alpha=24 beta=0 bp=45

# Cross Power Spectrum

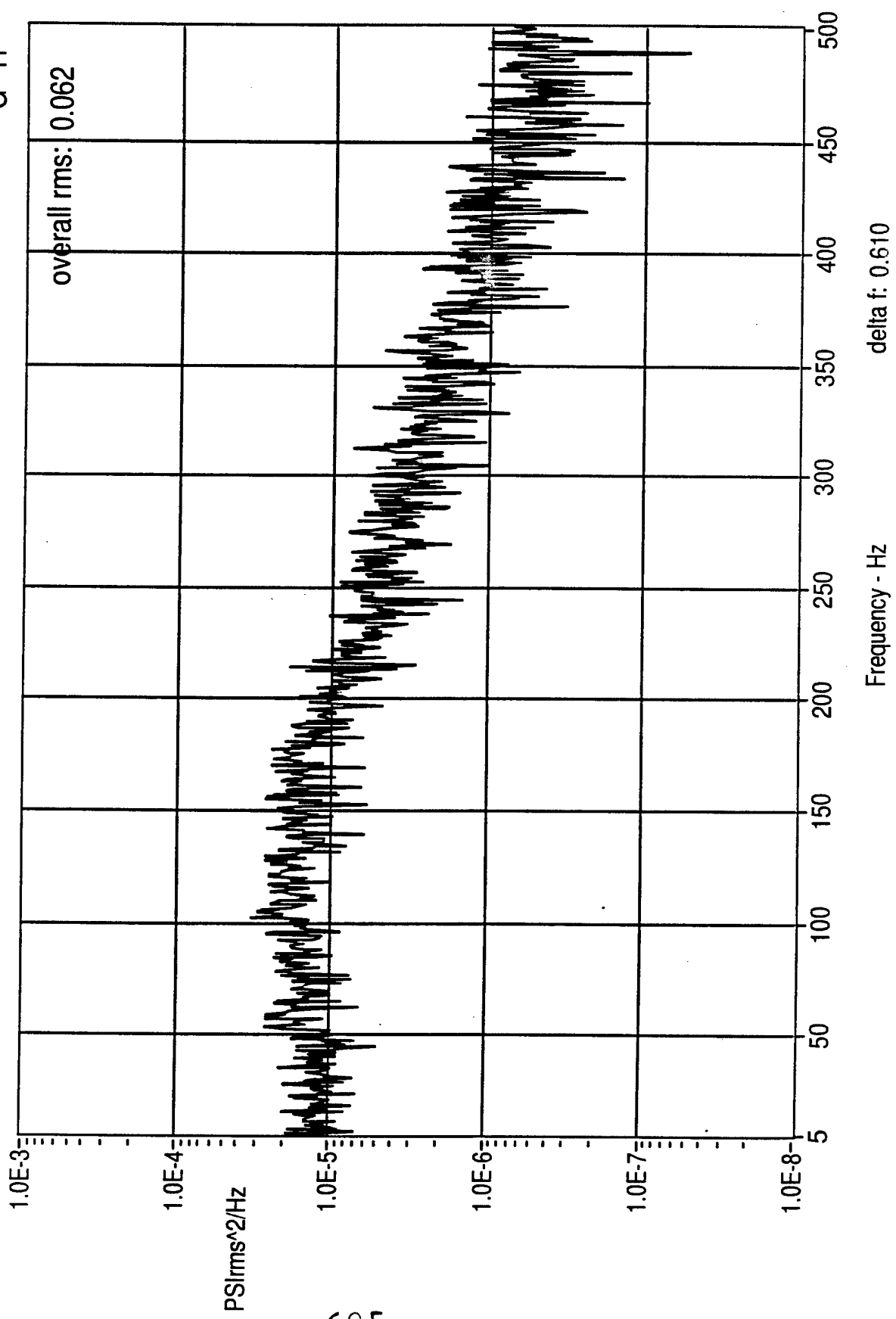
G - H



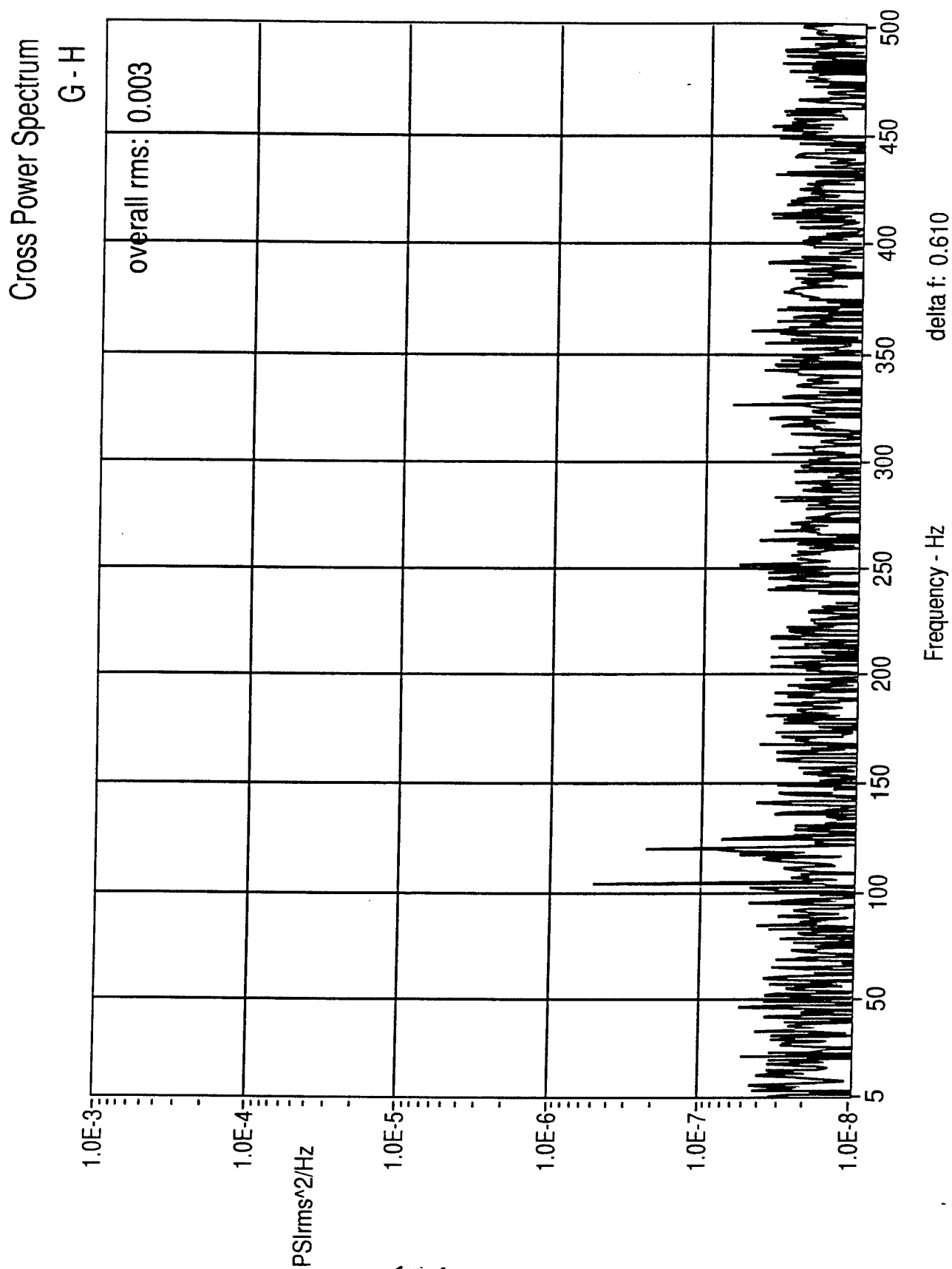
F-15 TPN\_3343: alpha=32 beta=0 bp=45

# Cross Power Spectrum

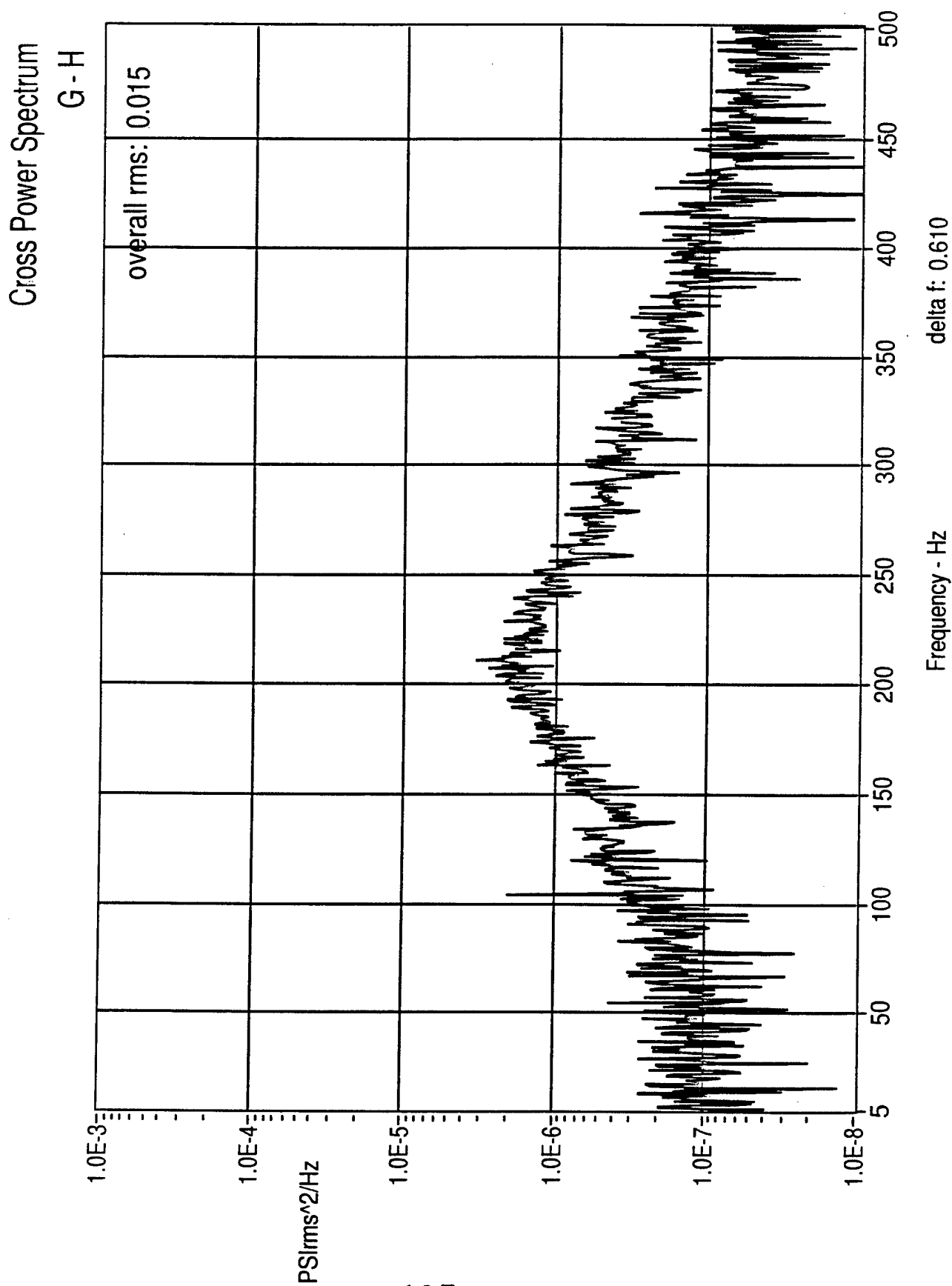
G - H



F-15 TPN\_3369: alpha=8 beta=-4 bp=45



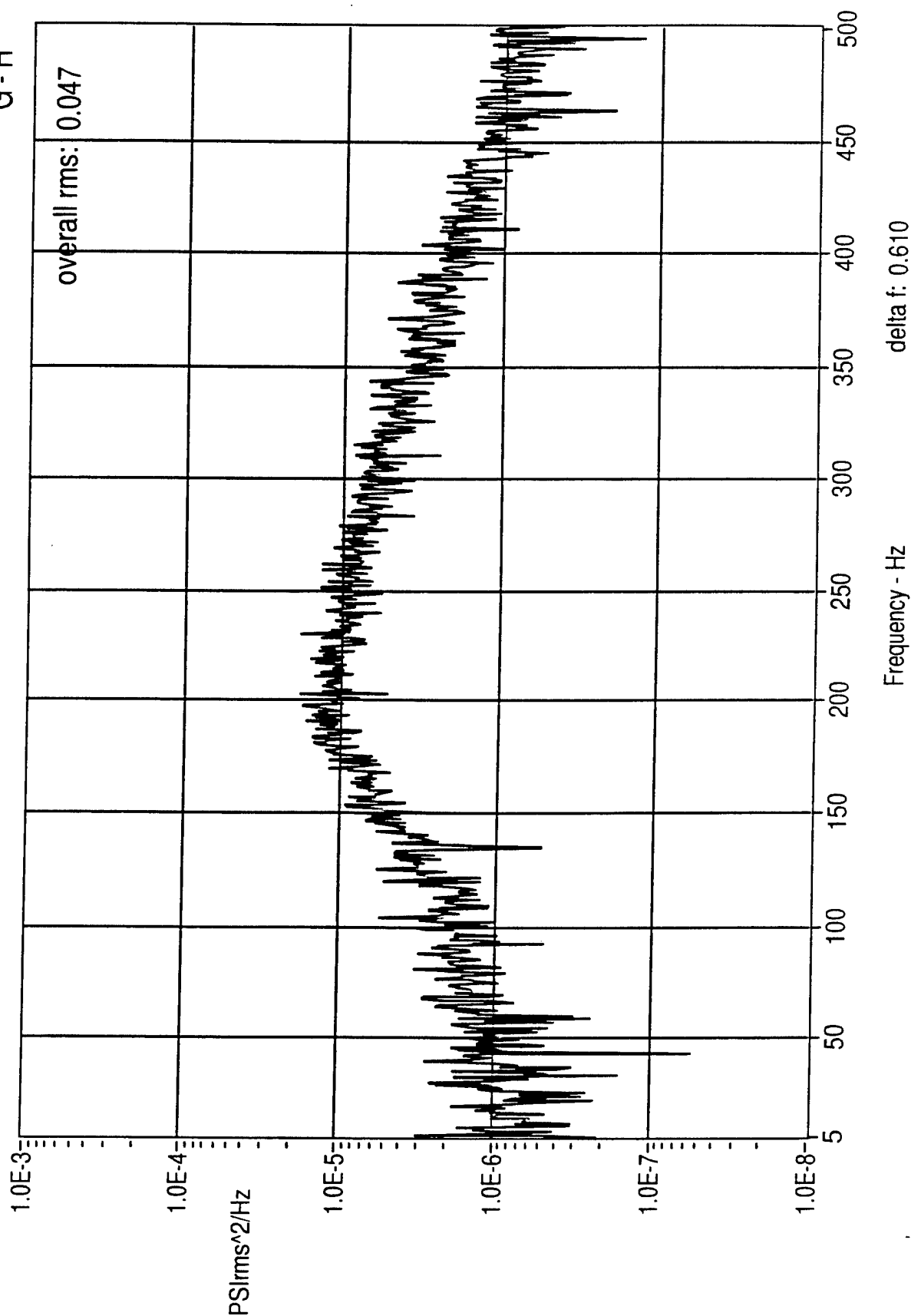
F-15 TPN\_3375: alpha=20 beta=-4 bp=45



F-15 TPN\_3377: alpha=24 beta=-4 bp=45

# Cross Power Spectrum

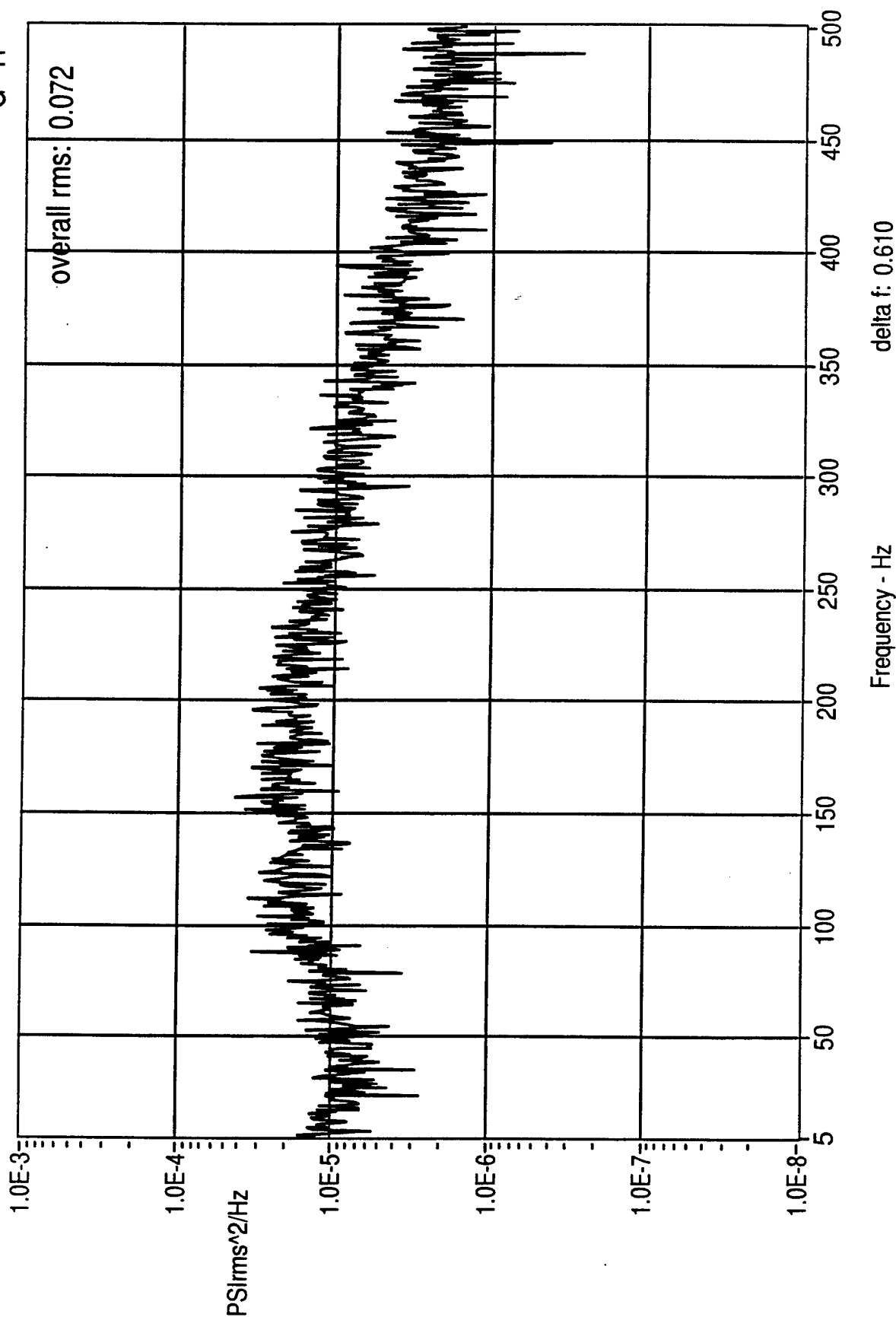
G - H



F-15 TPN\_3379: alpha=32 beta=-4 bp=45

# Cross Power Spectrum

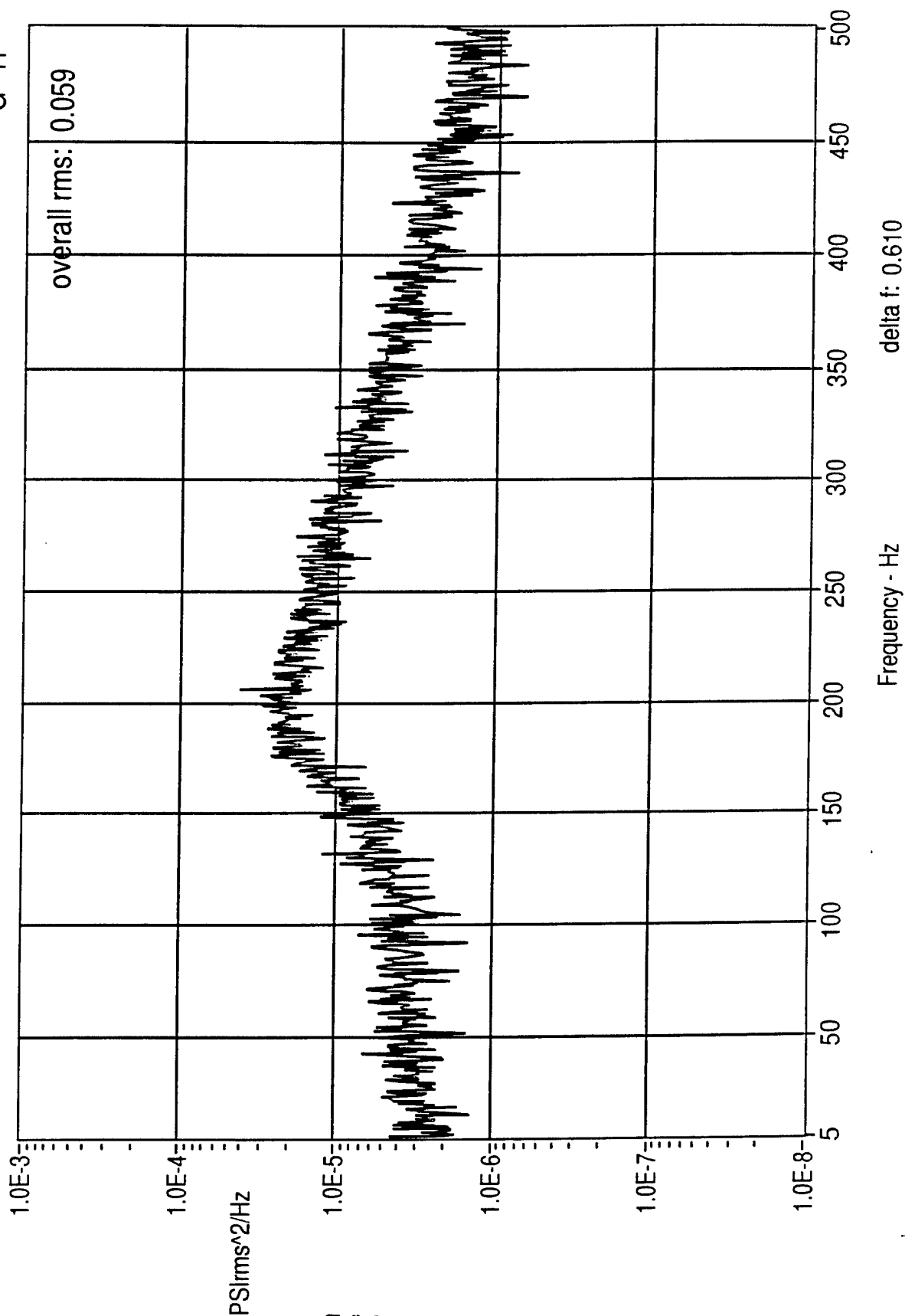
G - H



F-15 TPN\_3046: alpha=20 beta=4 bp=65

# Cross Power Spectrum

G - H

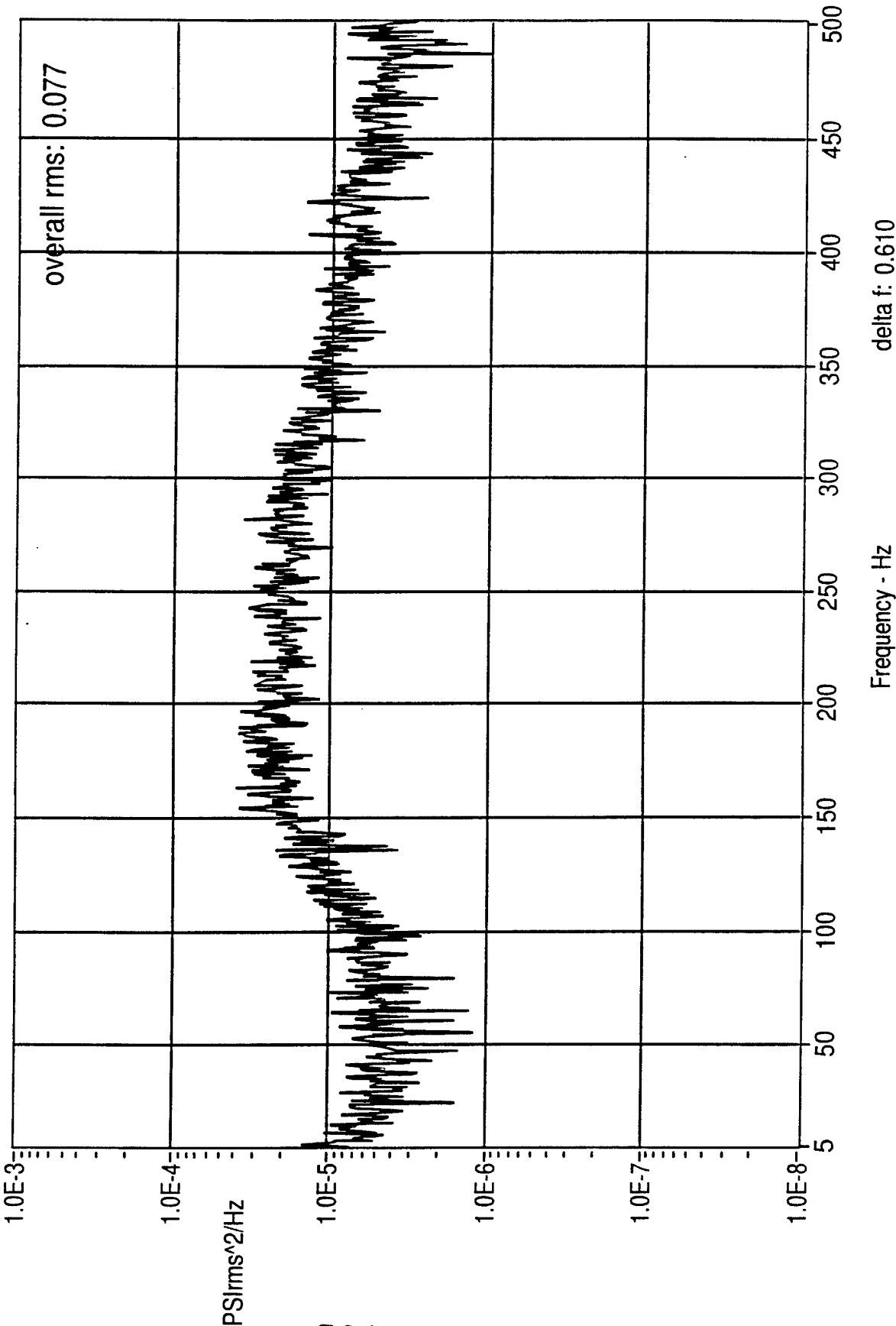




F-15 TPN\_3048: alpha=24 beta=4 bp=65

Cross Power Spectrum

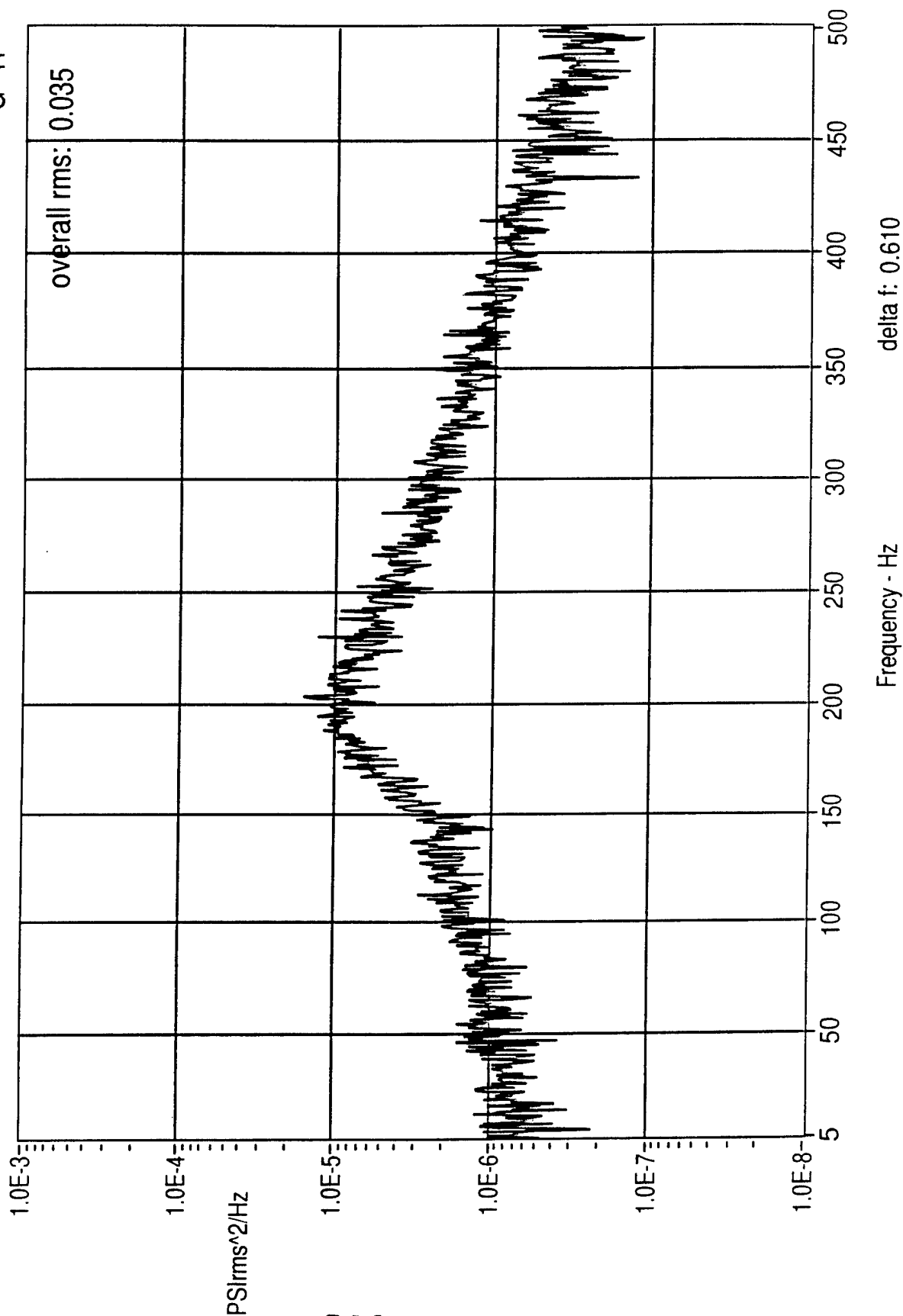
G - H



F-15 TPN\_3040: alpha=20 beta=0 bp=65

# Cross Power Spectrum

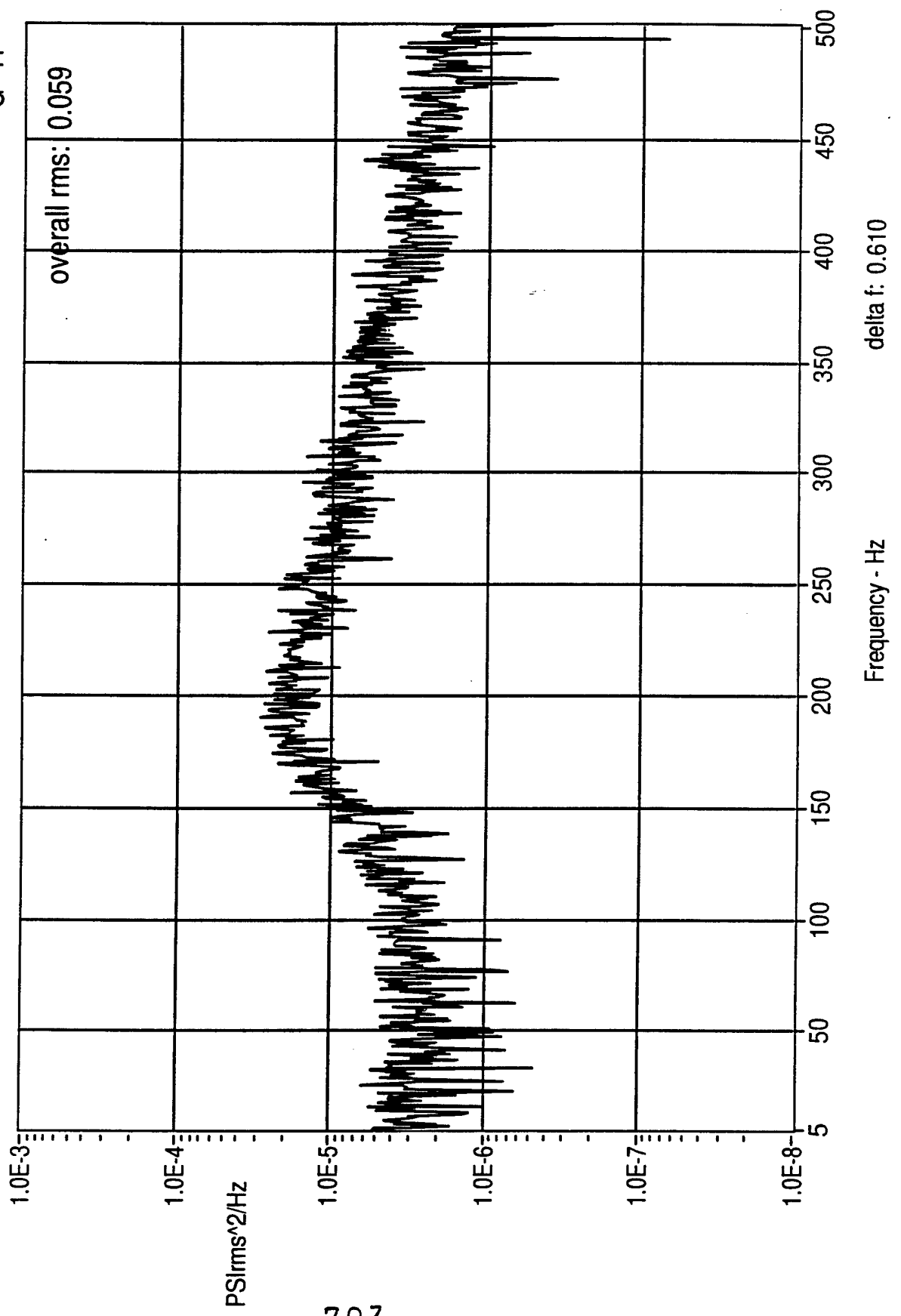
G-H



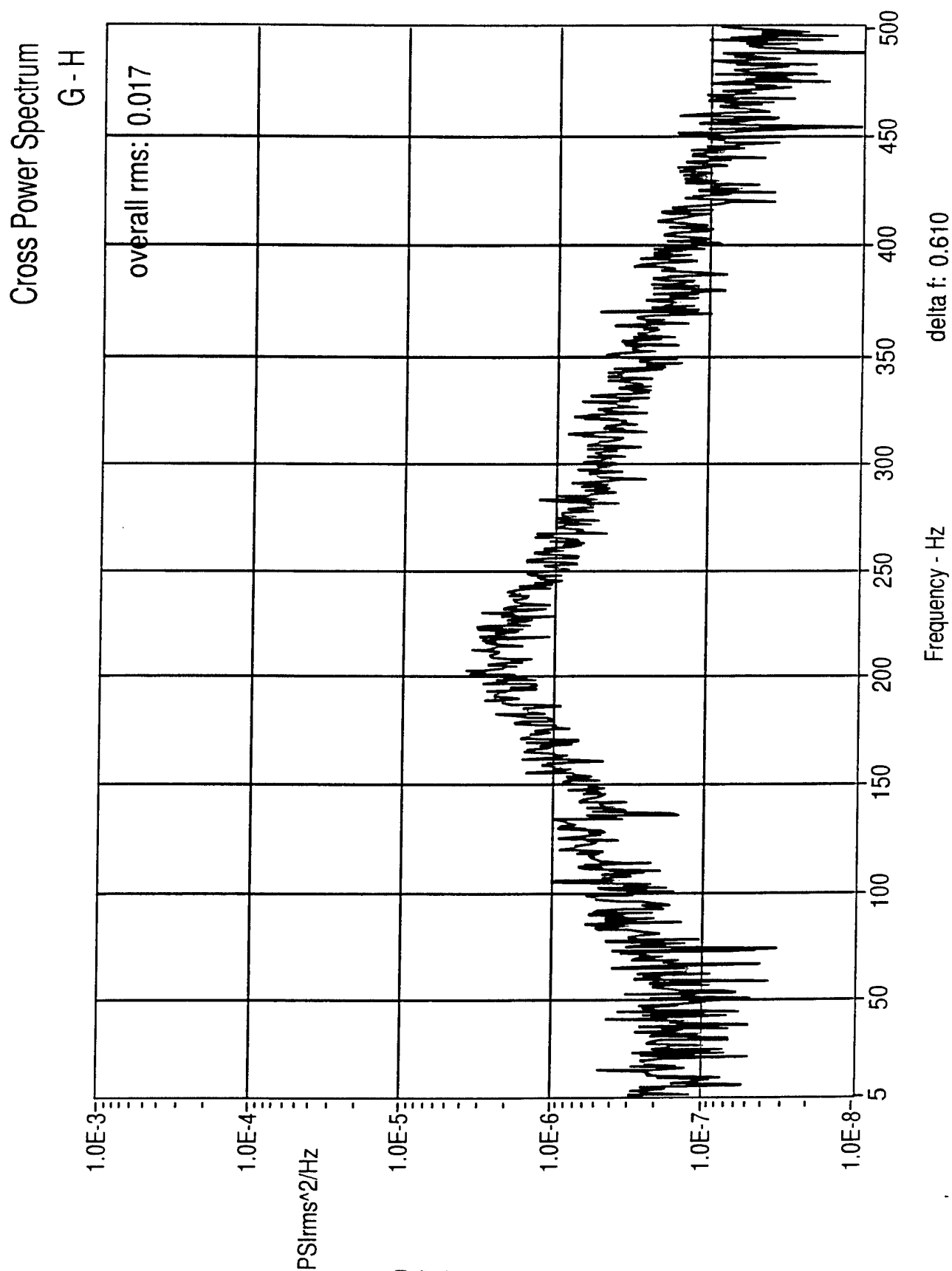
F-15 TPN\_3042: alpha=24 beta=0 bp=65

Cross Power Spectrum

G - H

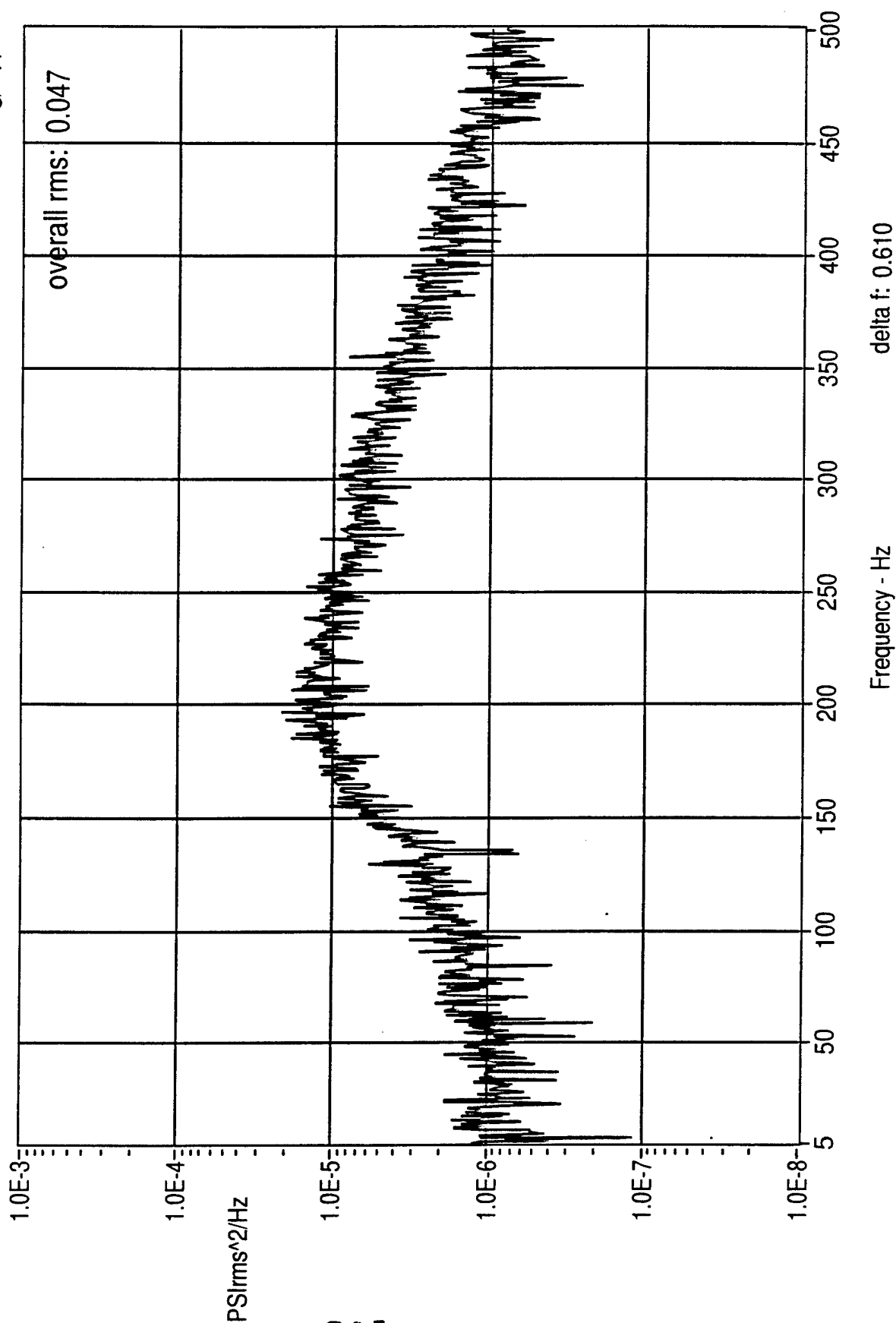


F-15 TPN\_3034: alpha=20 beta=-4 bp=65



F-15 TPN\_3036: alpha=24 beta=-4 bp=65

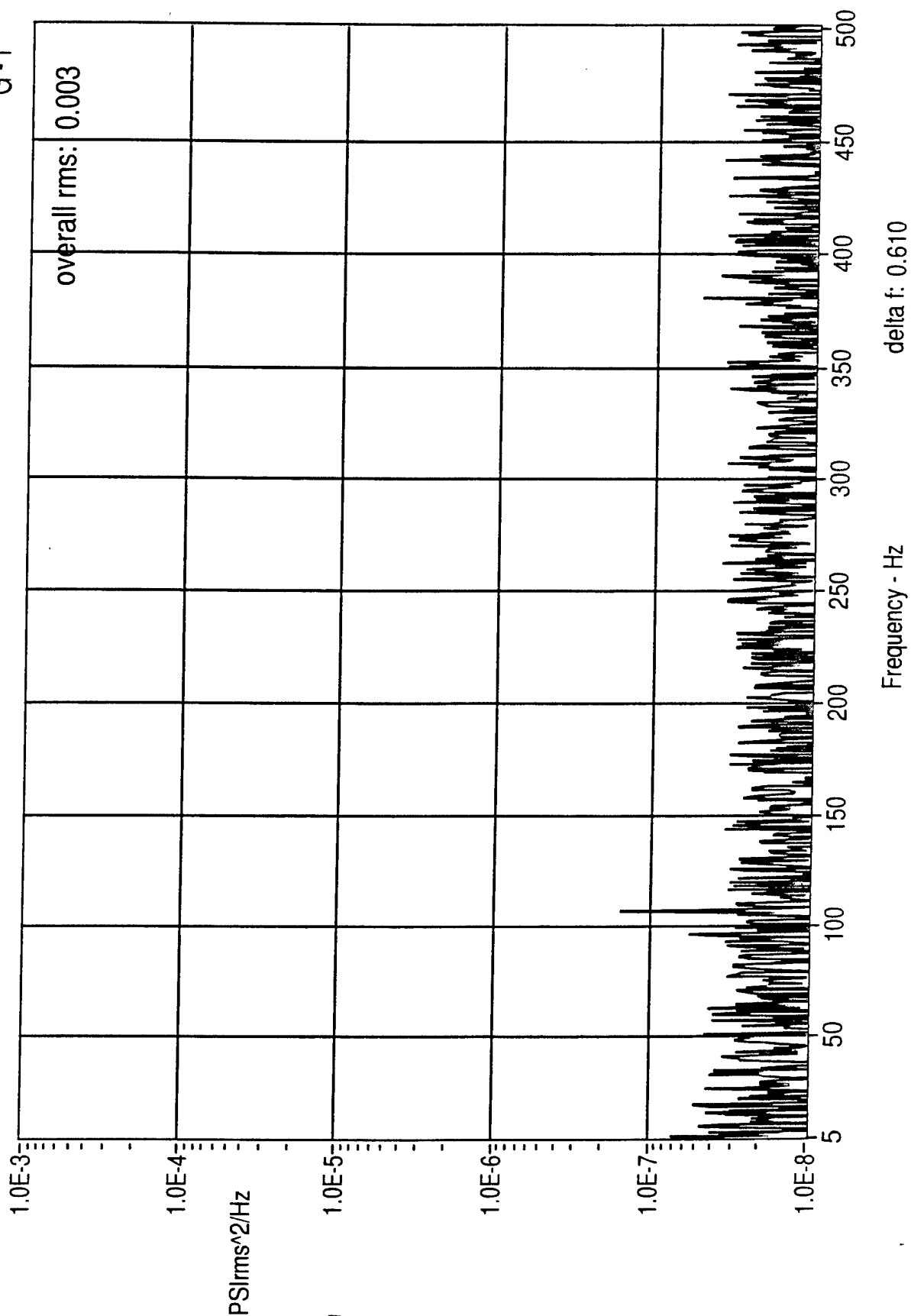
# Cross Power Spectrum G - H



F-15 TPN\_2918: alpha=8 beta=4 bp=0

# Cross Power Spectrum

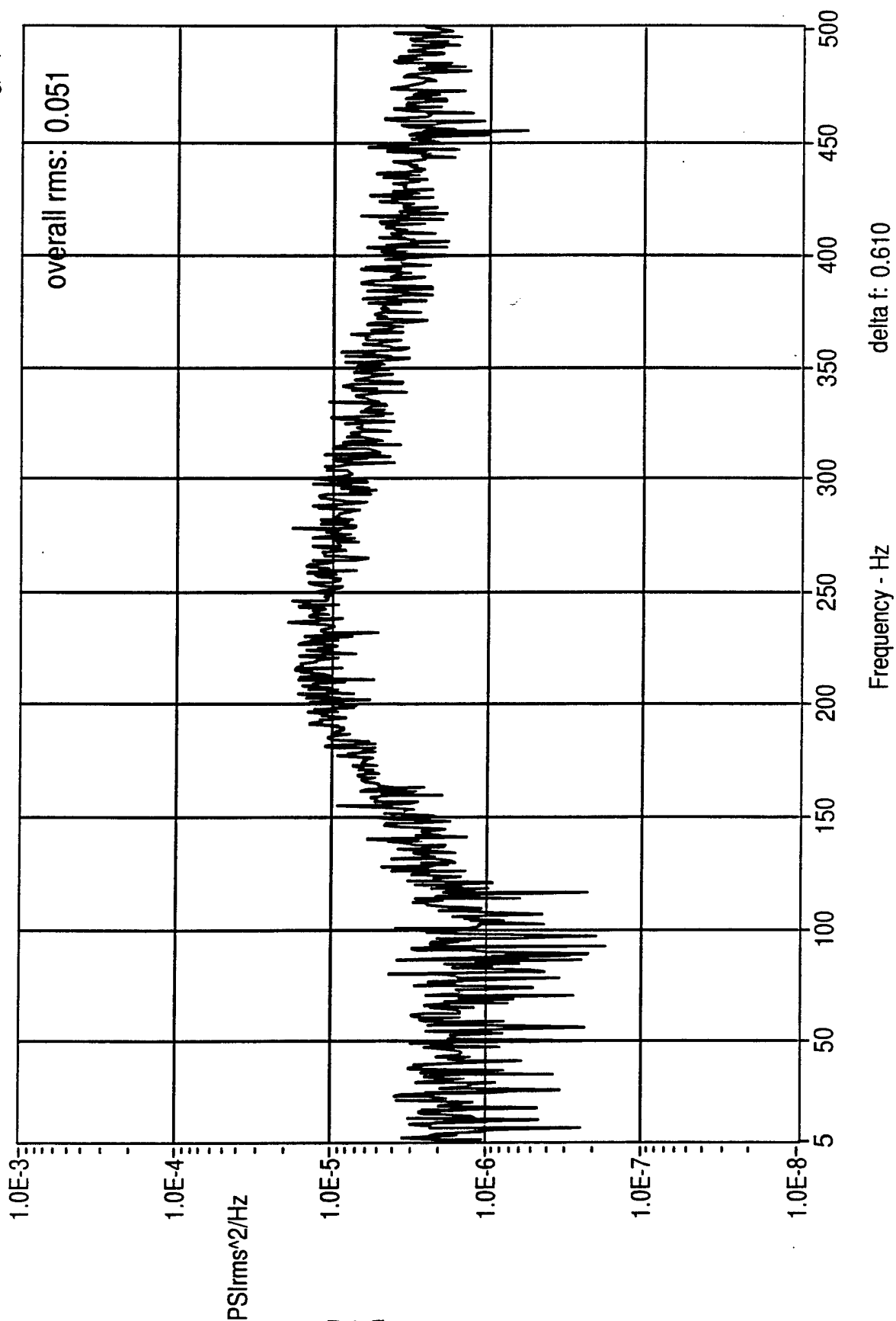
G-I



F-15 TPN\_2924: alpha=20 beta=4 bp=0

# Cross Power Spectrum

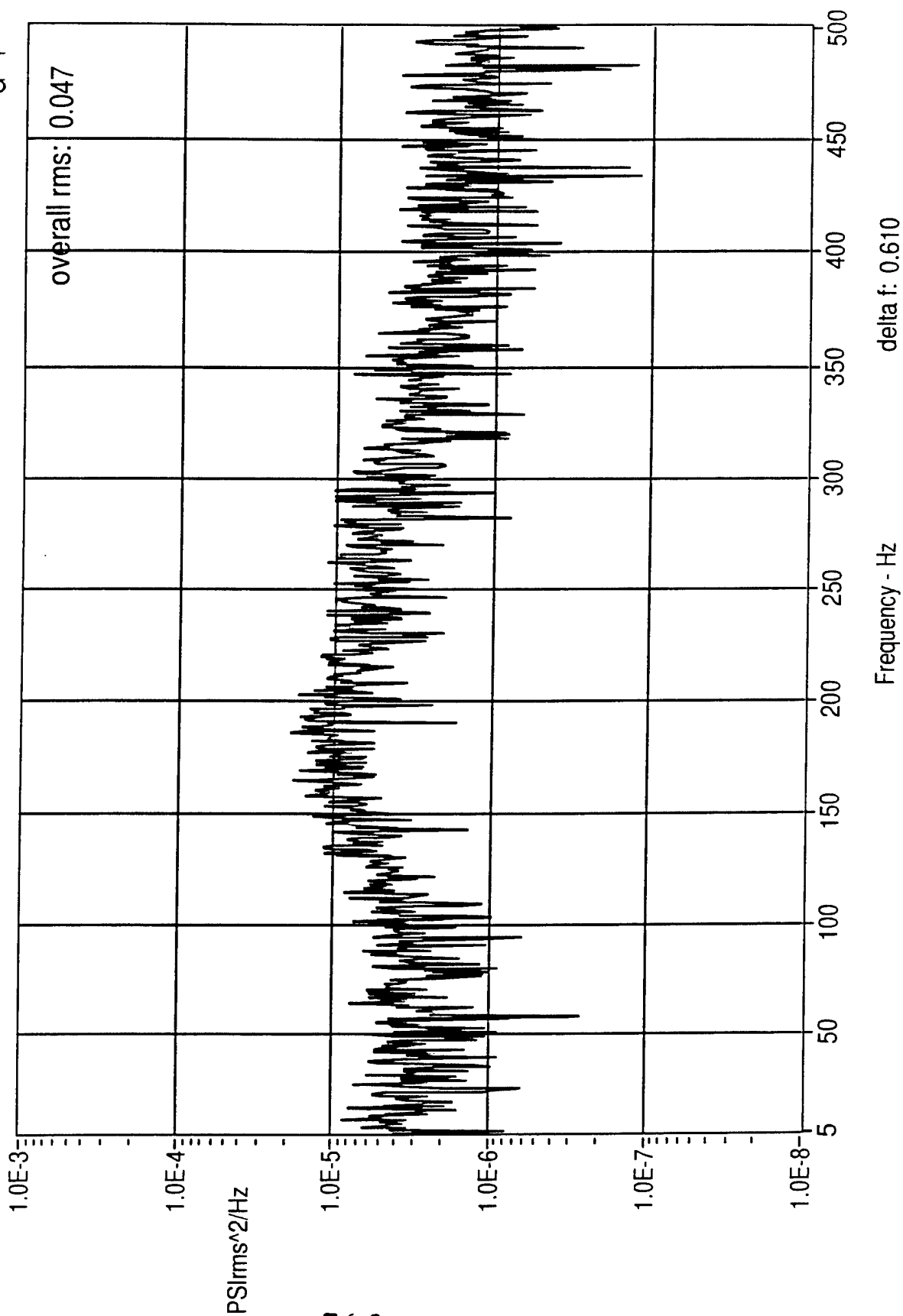
G-I



F-15 TPN\_2926: alpha=24 beta=4 bp=0

# Cross Power Spectrum

G - I

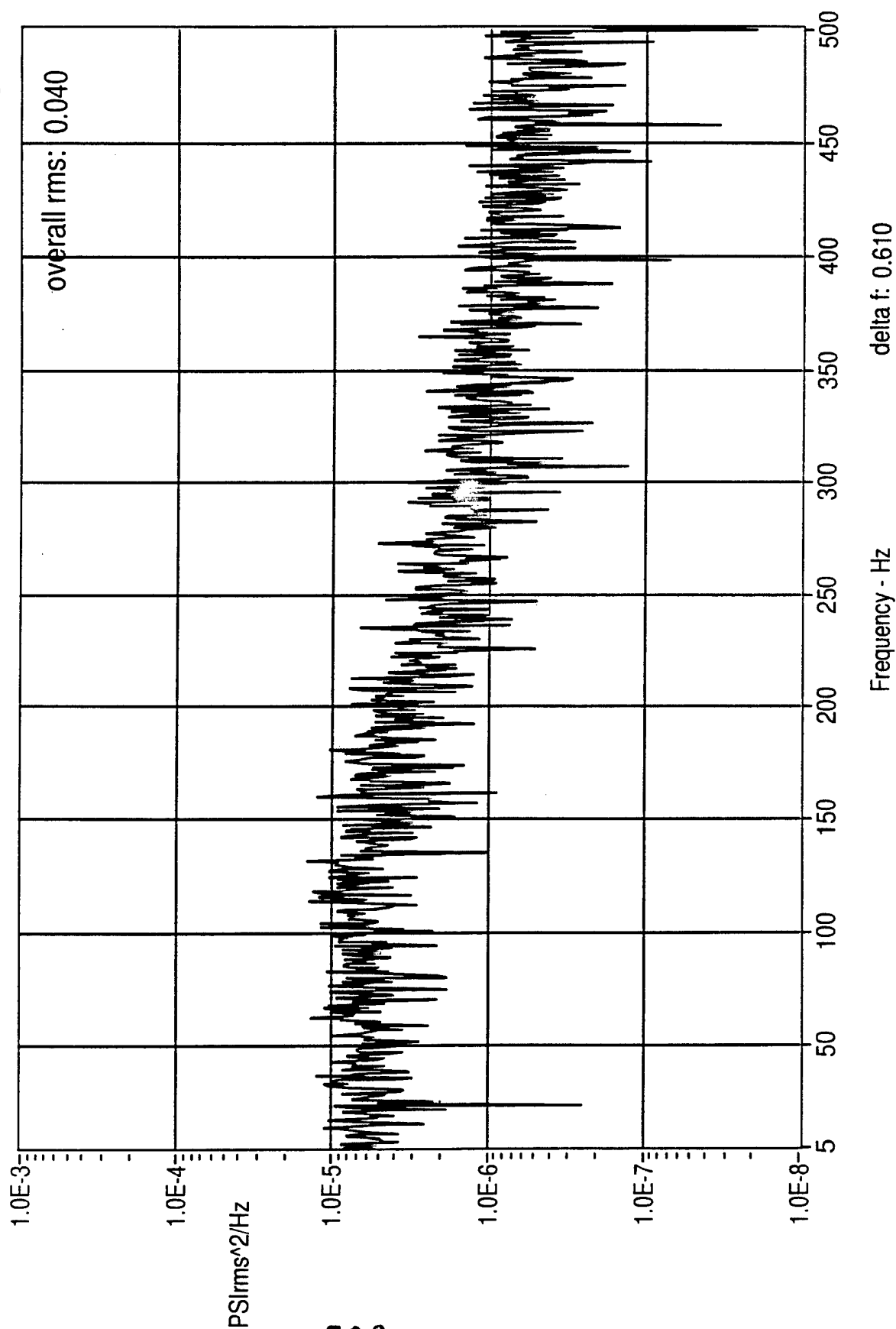




F-15 TPN\_2928: alpha=32 beta=4 bp=0

# Cross Power Spectrum

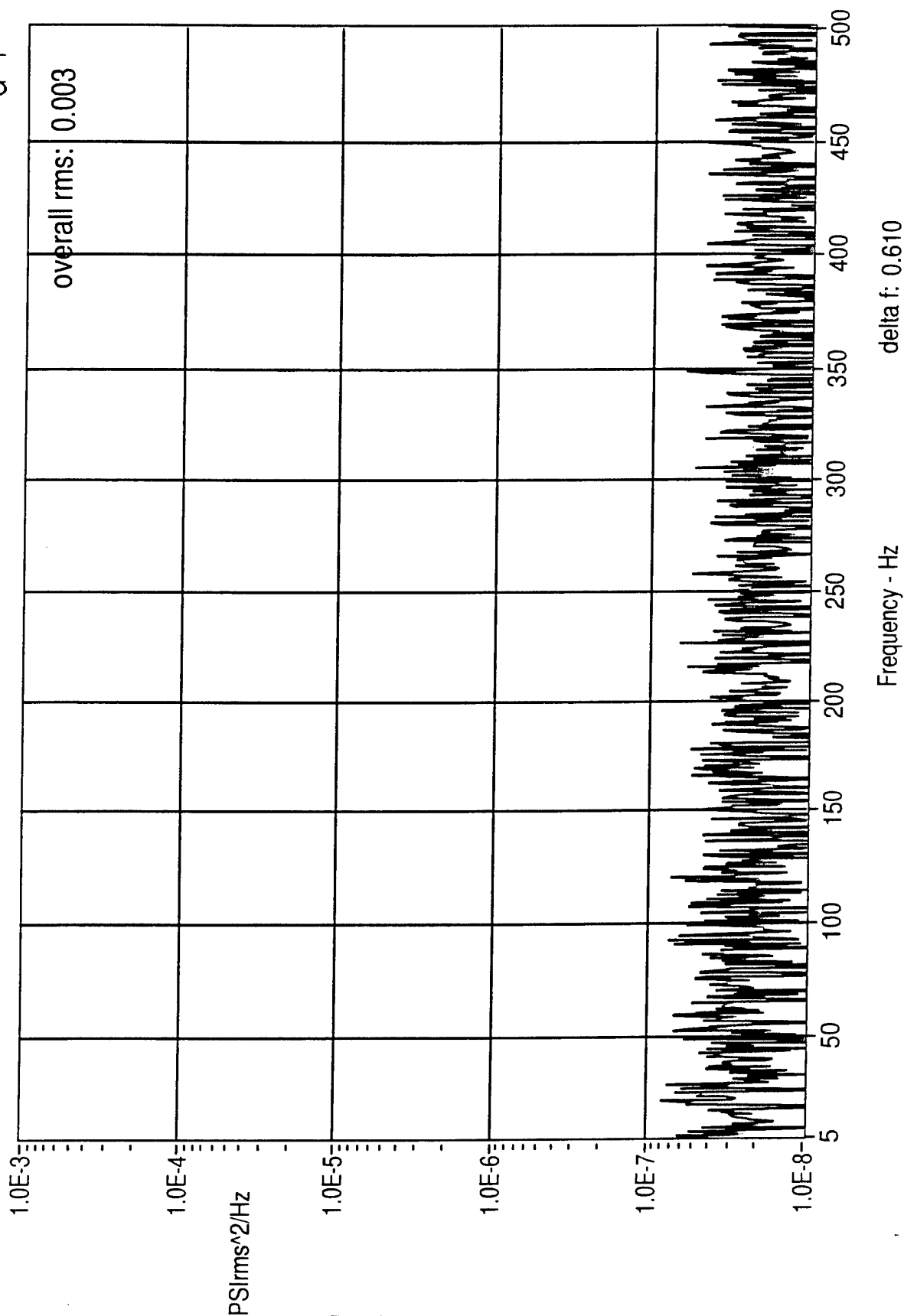
G-I



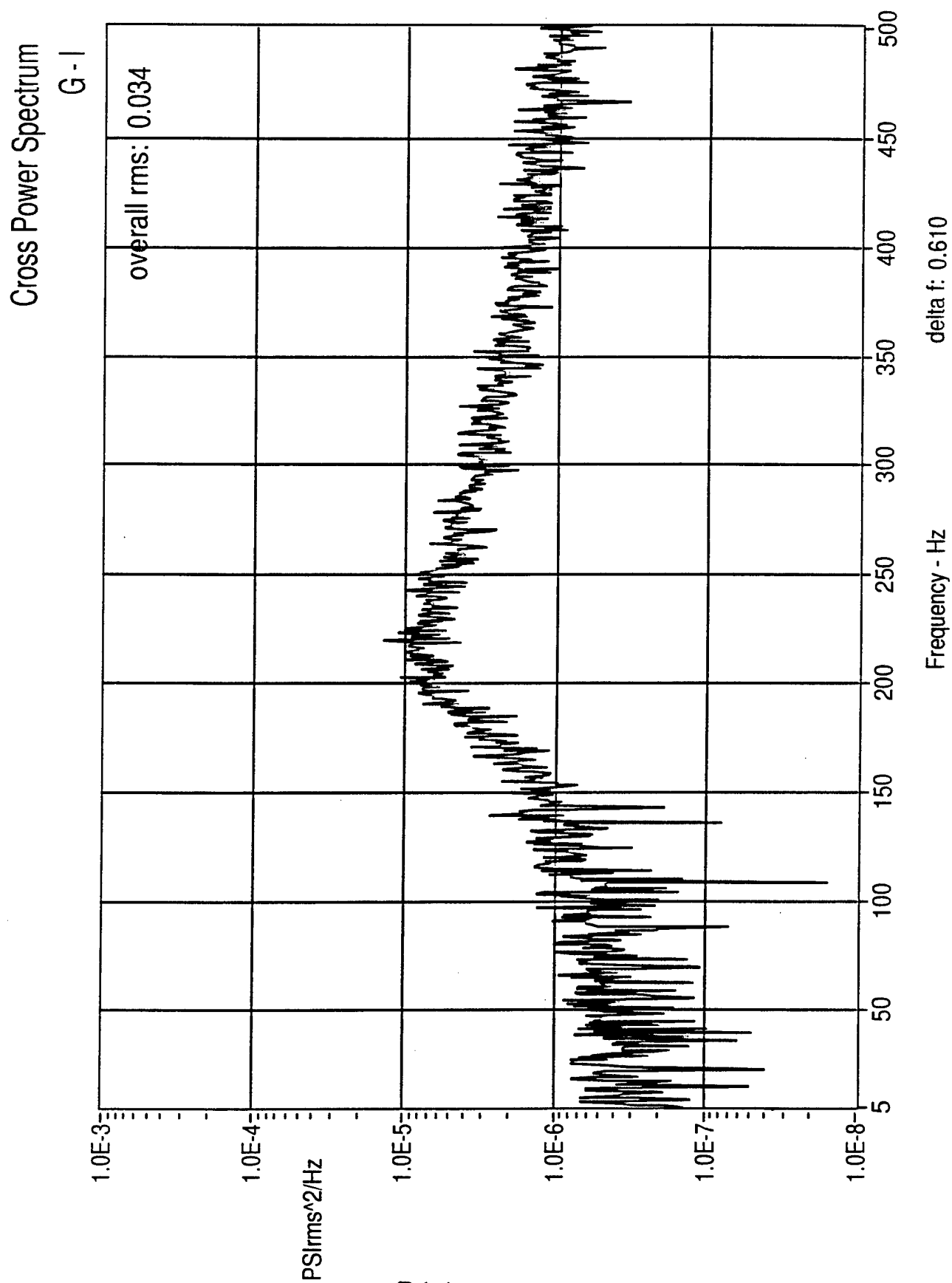
F-15 TPN\_2844: alpha=8 beta=0 bp=0

# Cross Power Spectrum

G - I



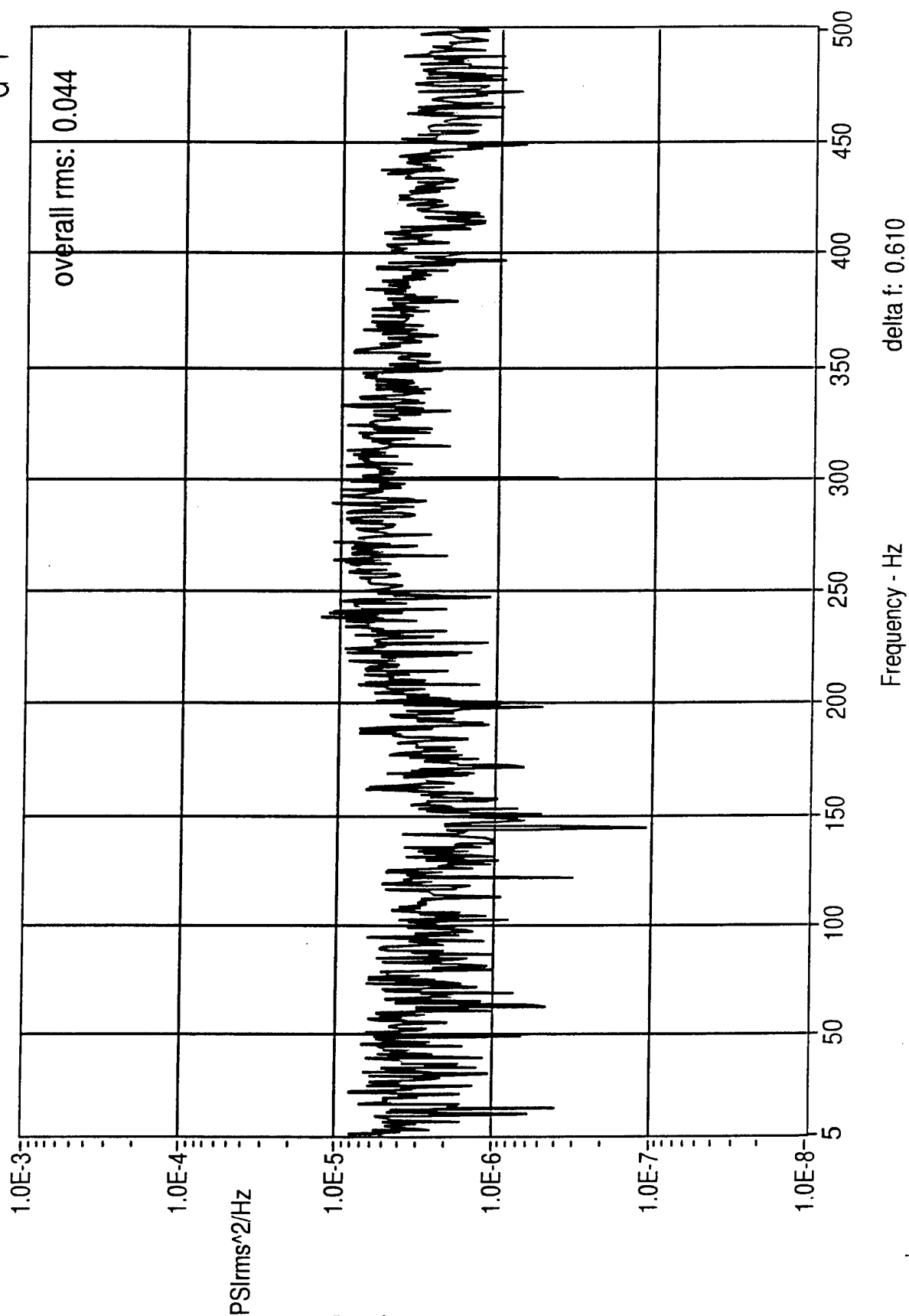
F-15 TPN\_2850: alpha=20 beta=0 bp=0



F-15 TPN\_2852: alpha=24 beta=0 bp=0

# Cross Power Spectrum

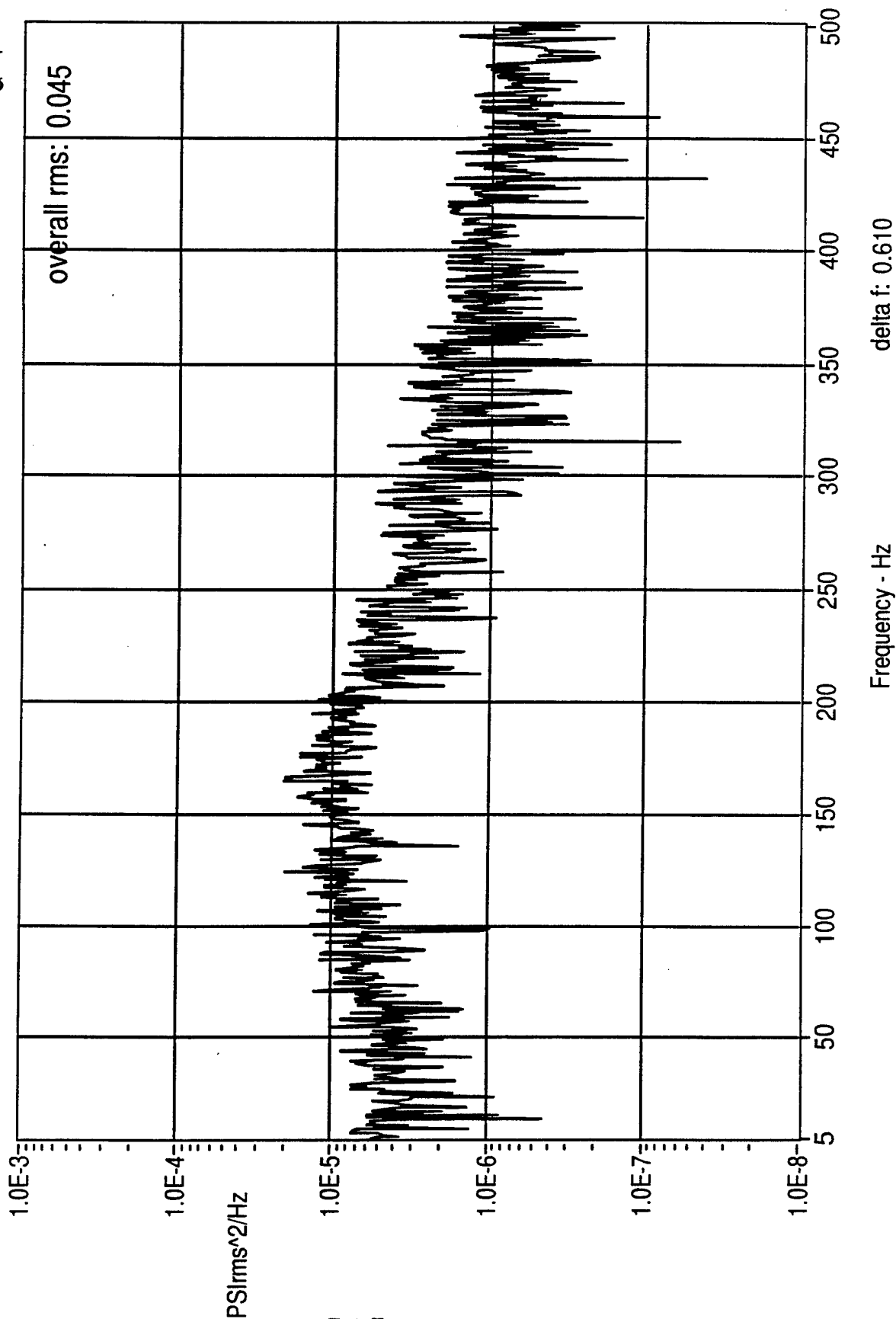
G - I



F-15 TPN\_2854: alpha=32 beta=0 bp=0

# Cross Power Spectrum

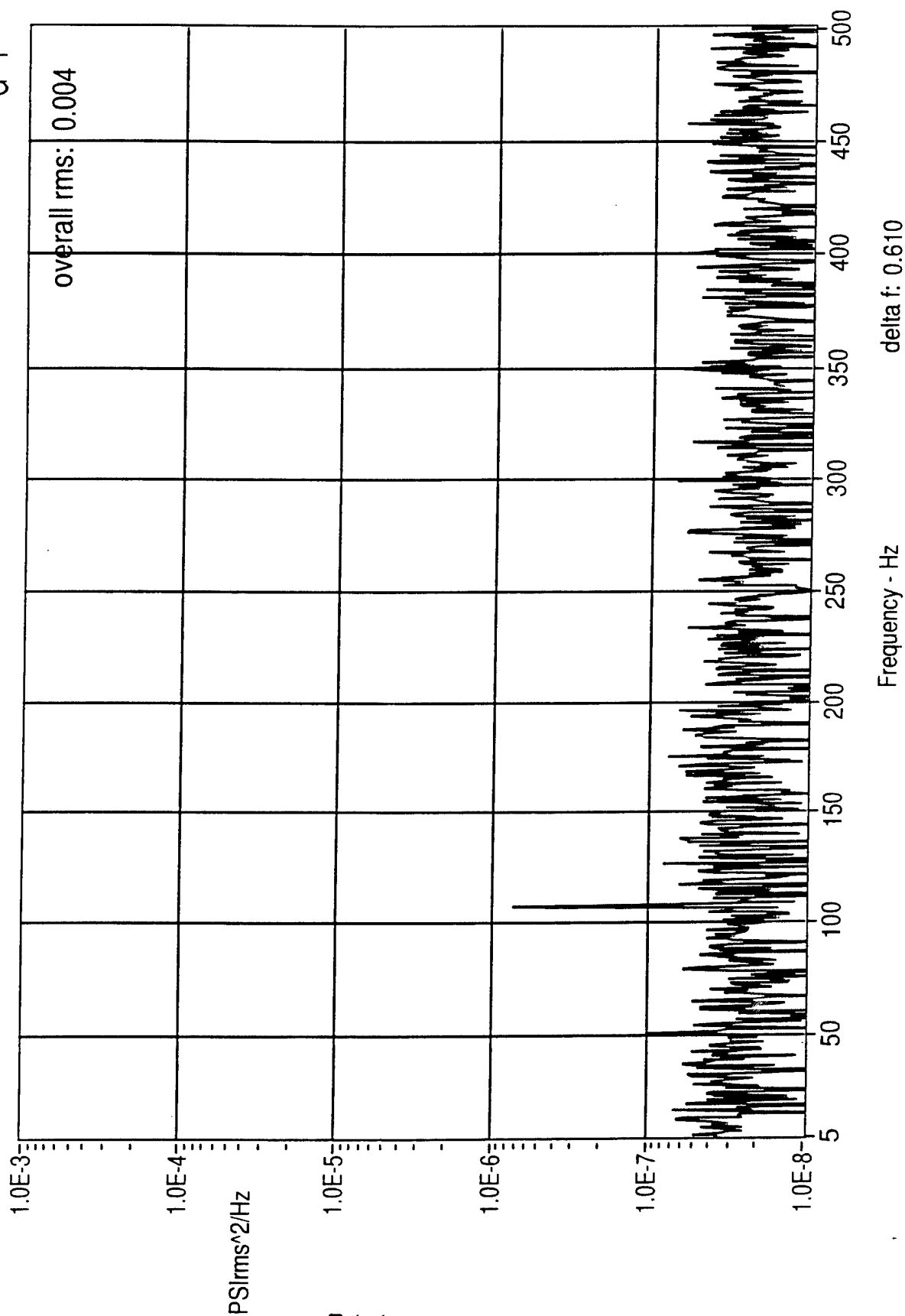
G-I



F-15 TPN\_2864: alpha=8 beta=-4 bp=0

# Cross Power Spectrum

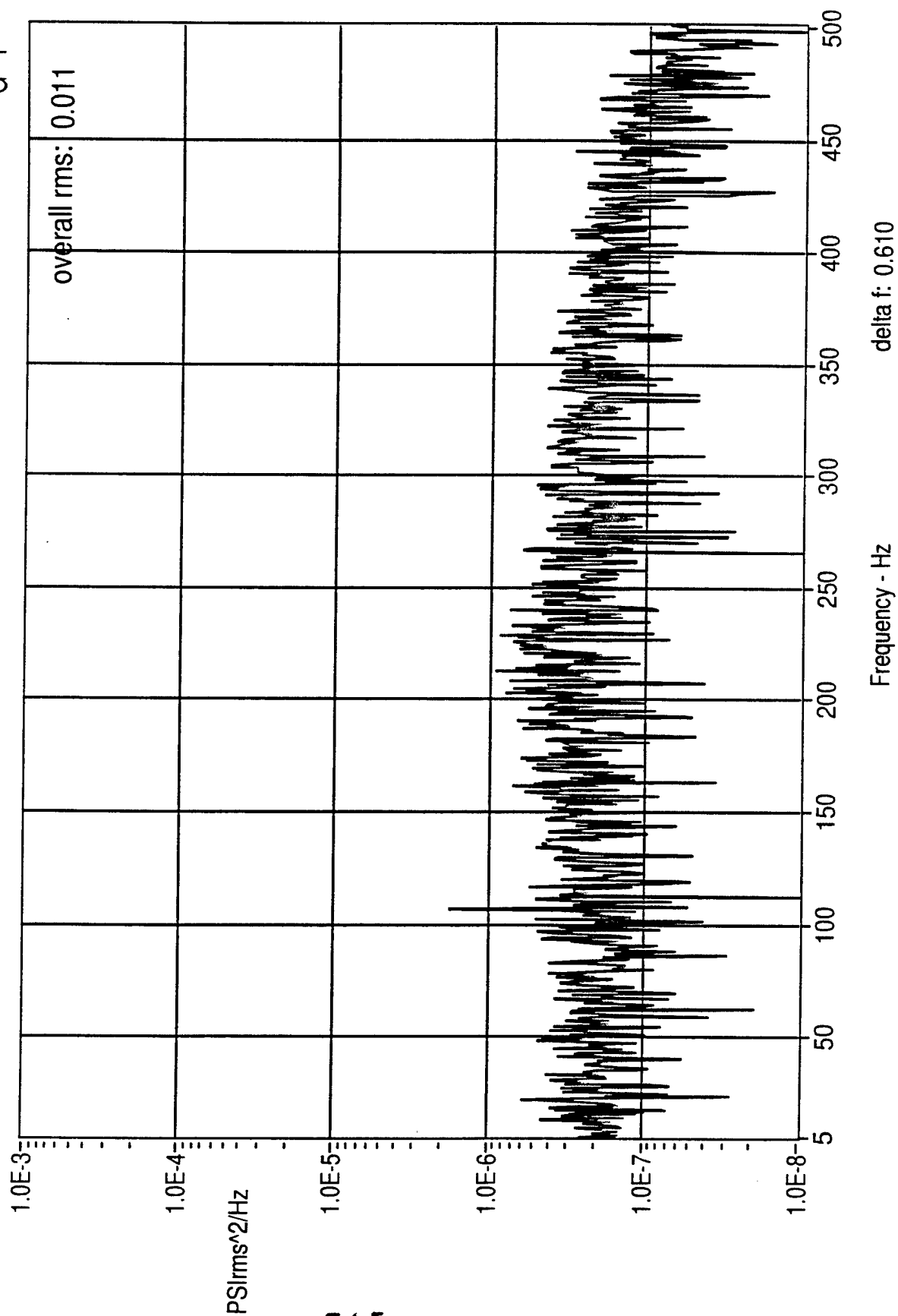
G-I



F-15 TPN\_2870: alpha=20 beta=-4 bp=0

# Cross Power Spectrum

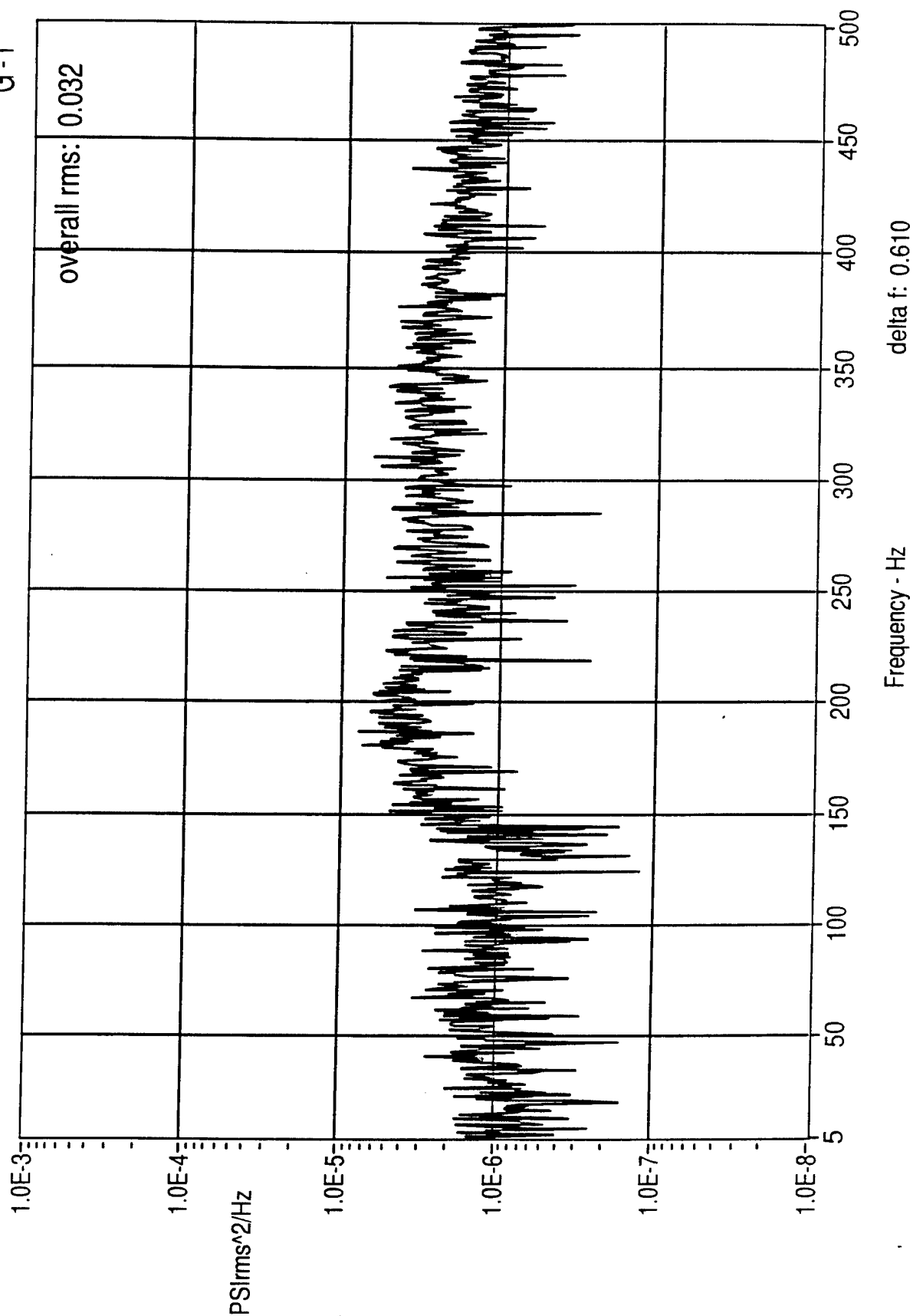
G-I



F-15 TPN\_2872: alpha=24 beta=-4 bp=0

# Cross Power Spectrum

G - I

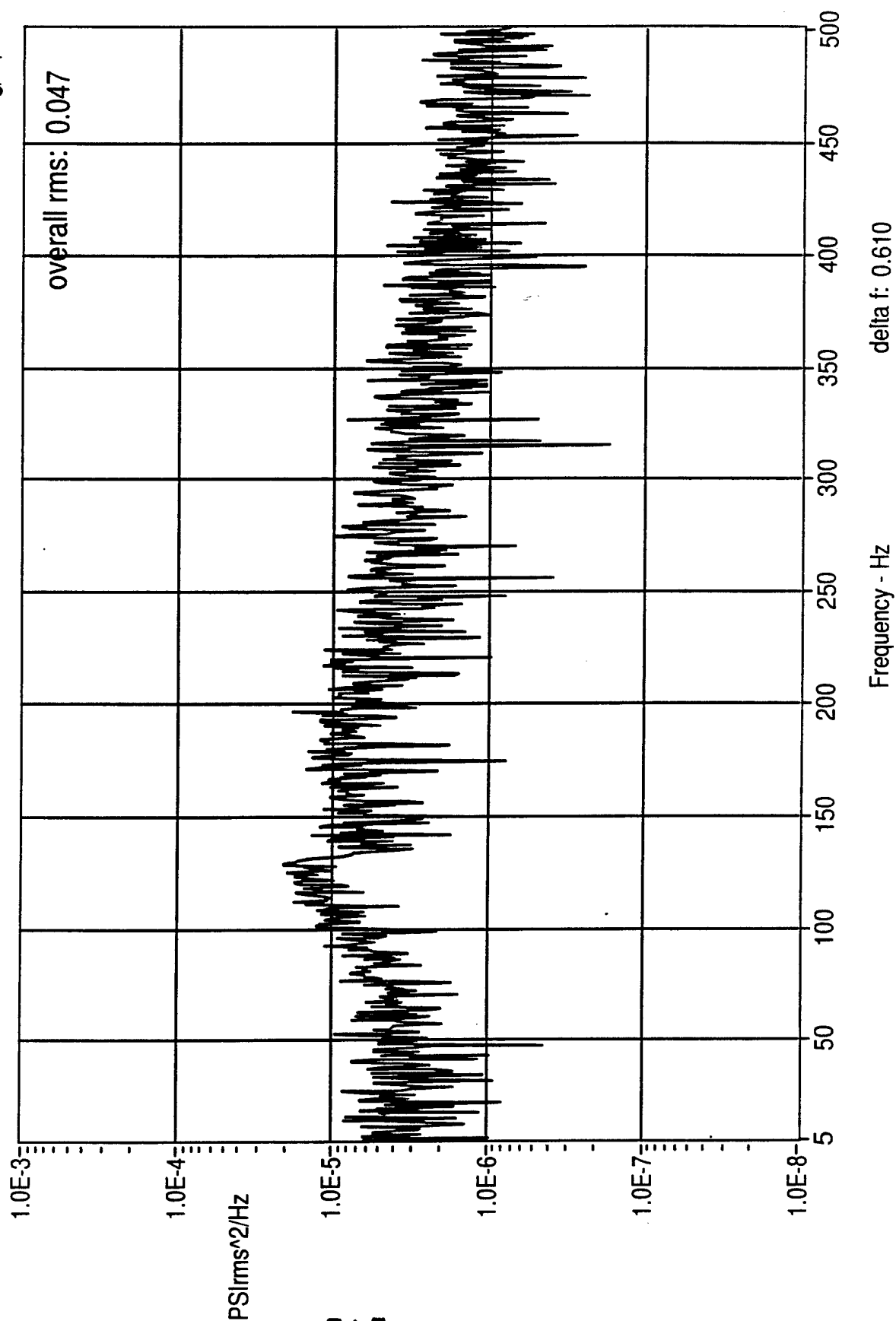




F-15 TPN\_2874: alpha=32 beta=-4 bp=0

# Cross Power Spectrum

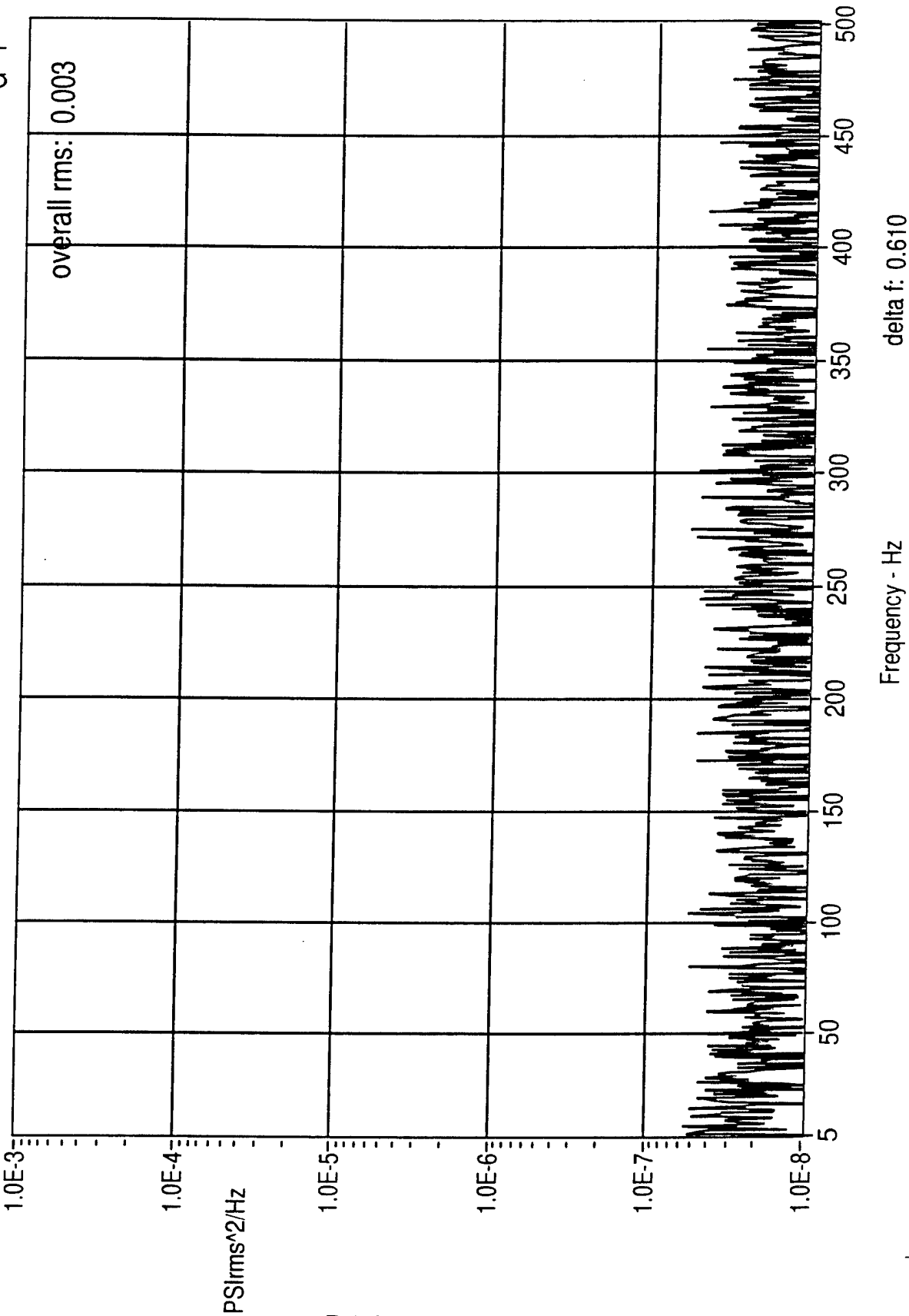
G-I



F-15 TPN\_3351: alpha=8 beta=4 bp=45

Cross Power Spectrum

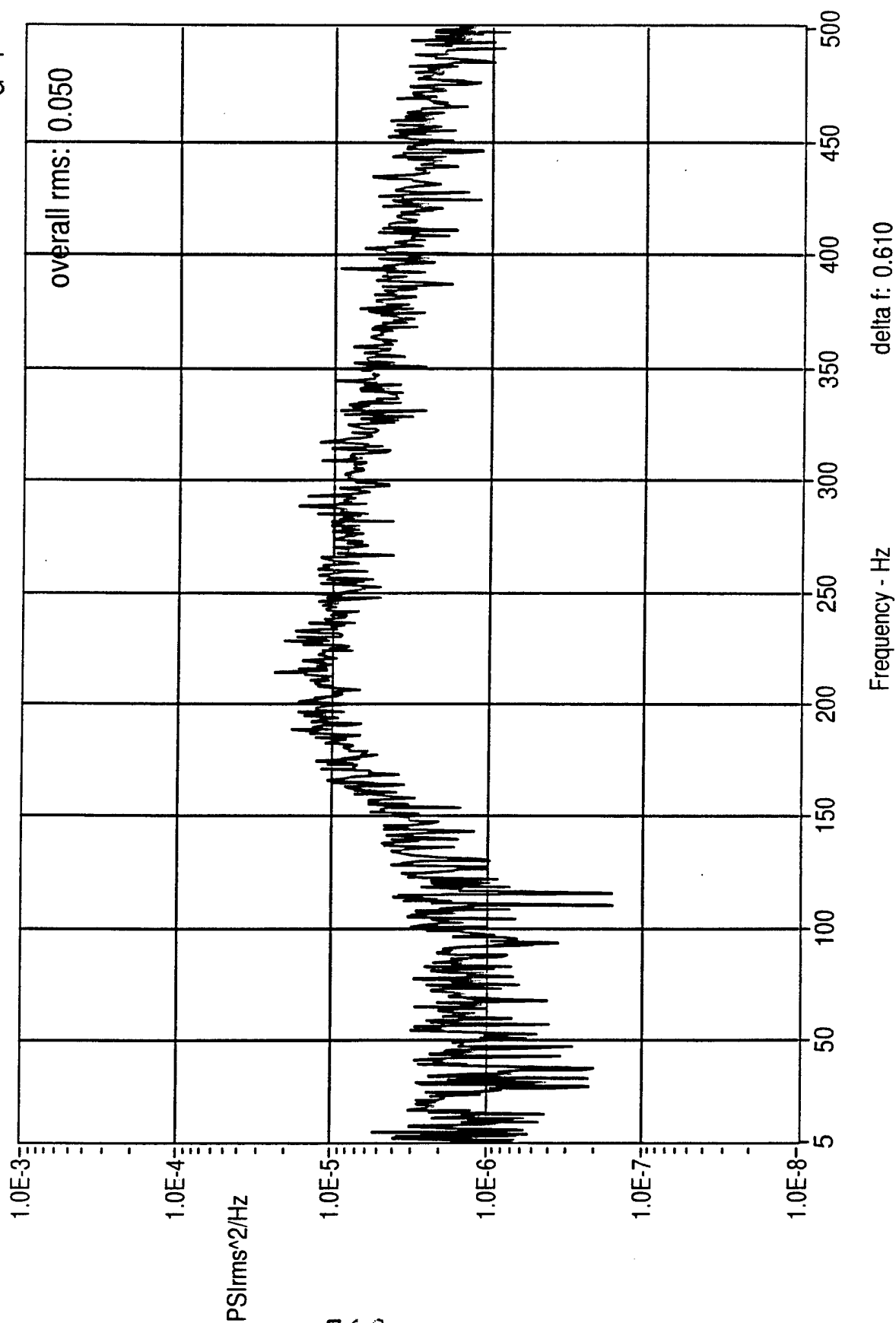
G - I



F-15 TPN\_3357: alpha=20 beta=4 bp=45

# Cross Power Spectrum

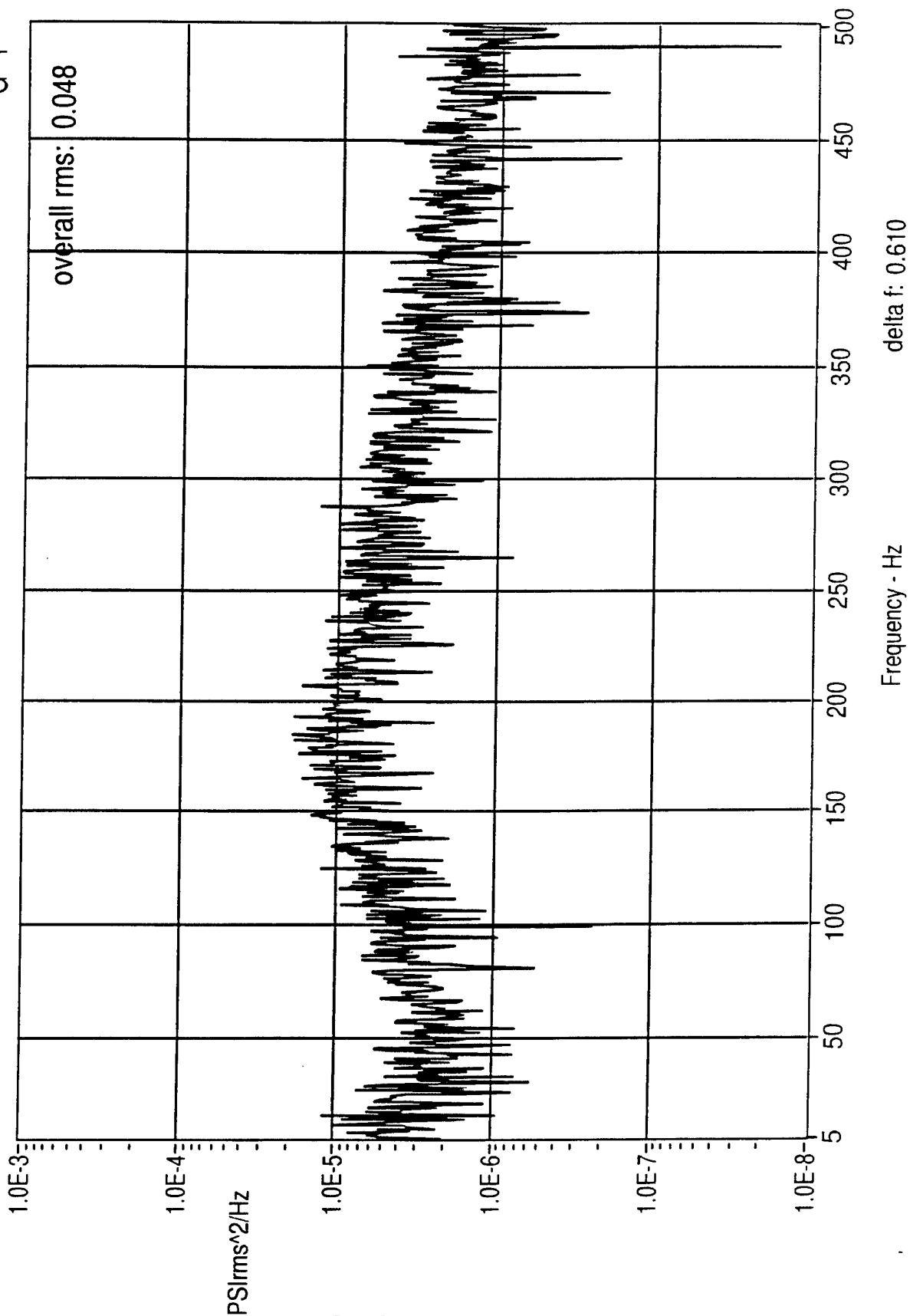
G-I



F-15 TPN\_3359: alpha=24 beta=4 bp=45

# Cross Power Spectrum

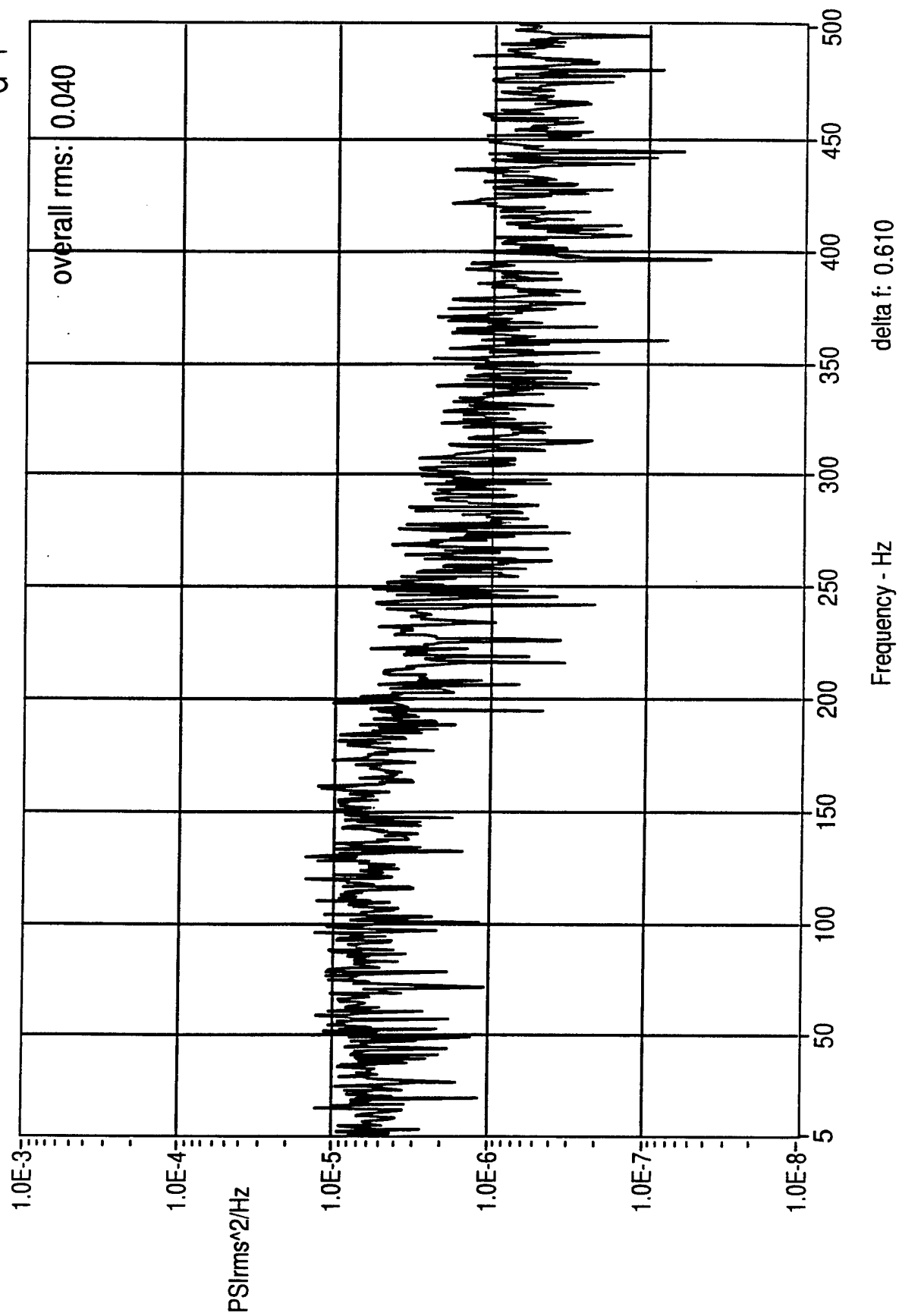
G-I



F-15 TPN\_3361: alpha=32 beta=4 bp=45

# Cross Power Spectrum

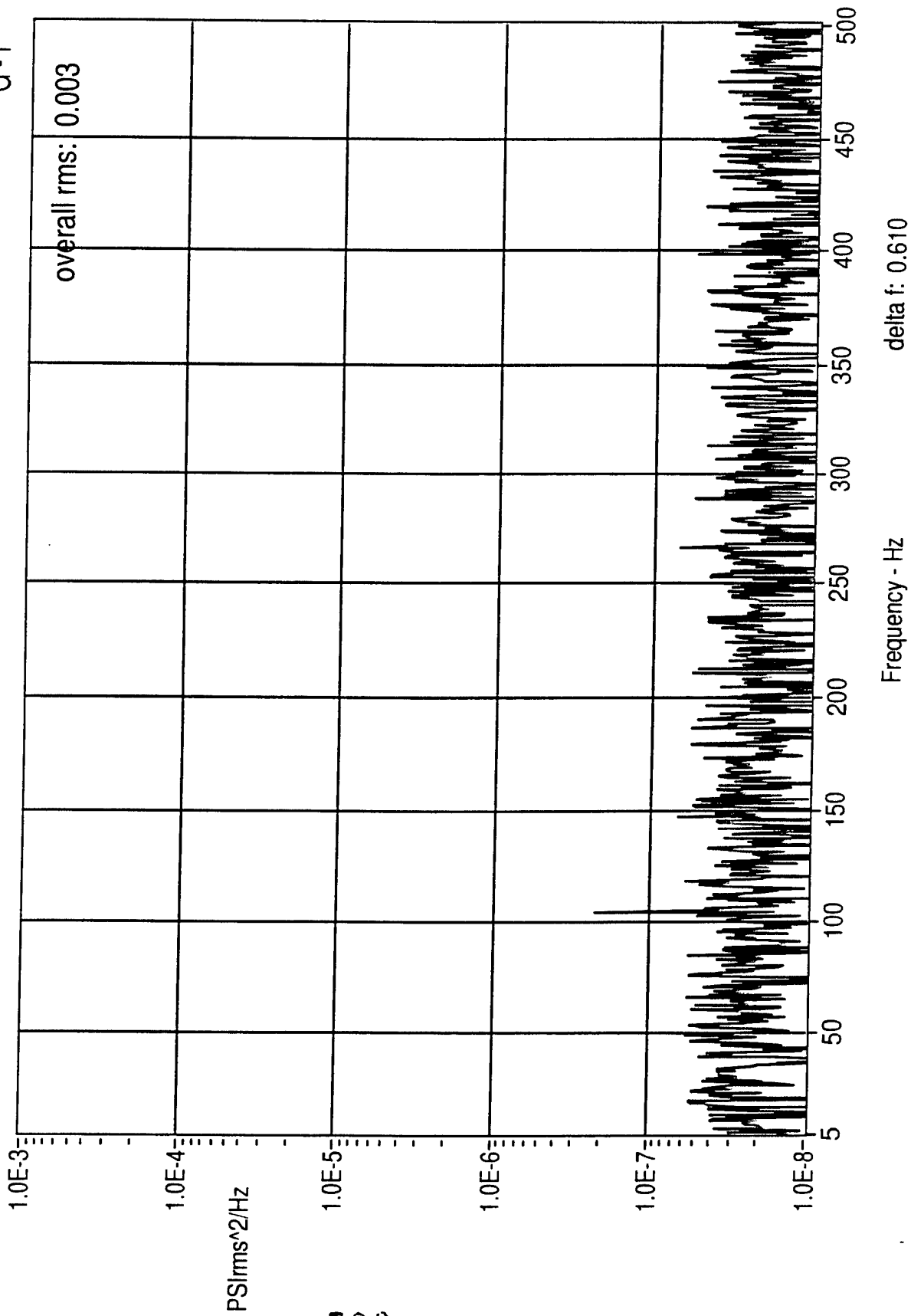
G - I



F-15 TPN\_3333: alpha=8 beta=0 bp=45

# Cross Power Spectrum

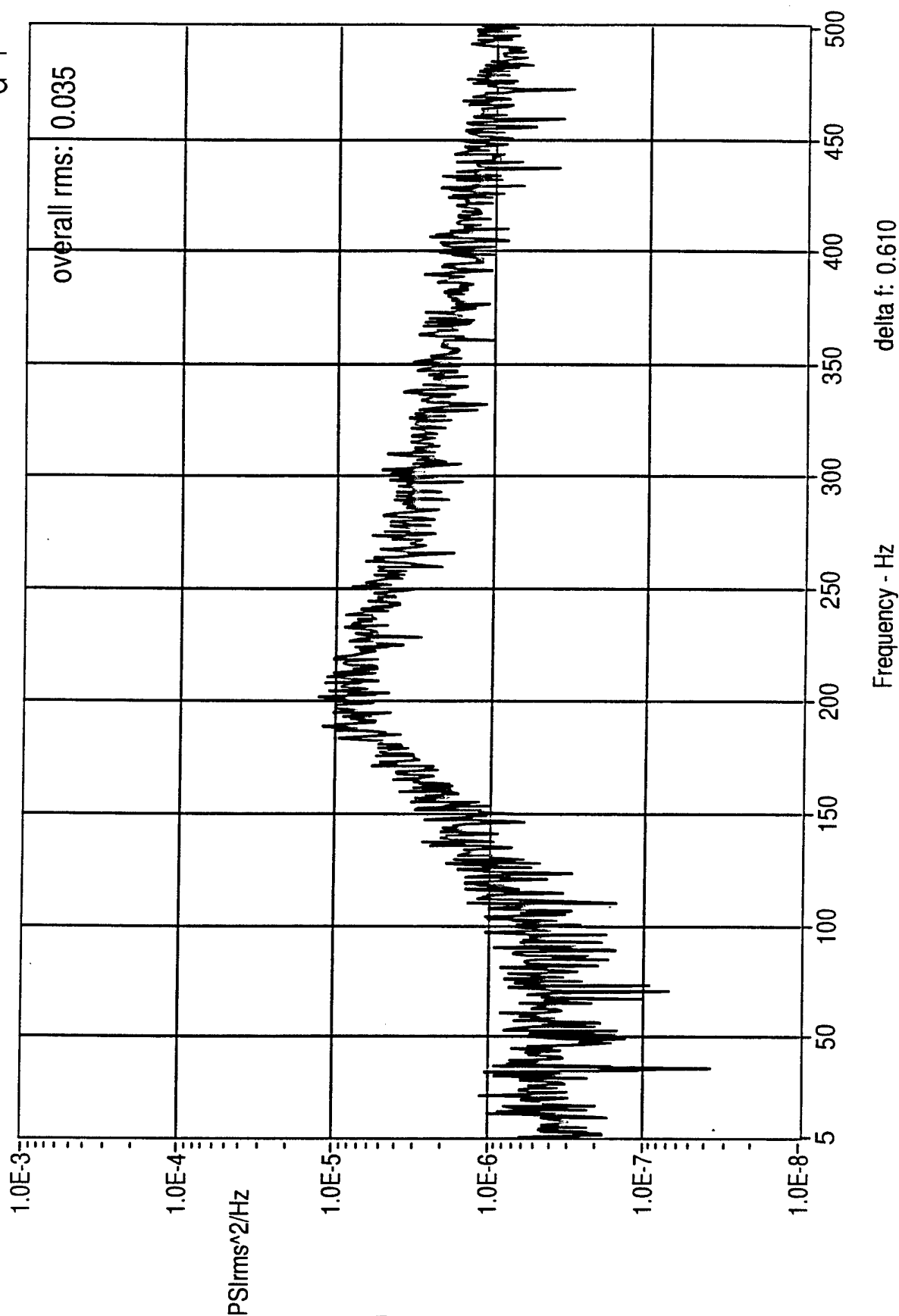
G - I



F-15 TPN\_3339: alpha=20 beta=0 bp=45

# Cross Power Spectrum

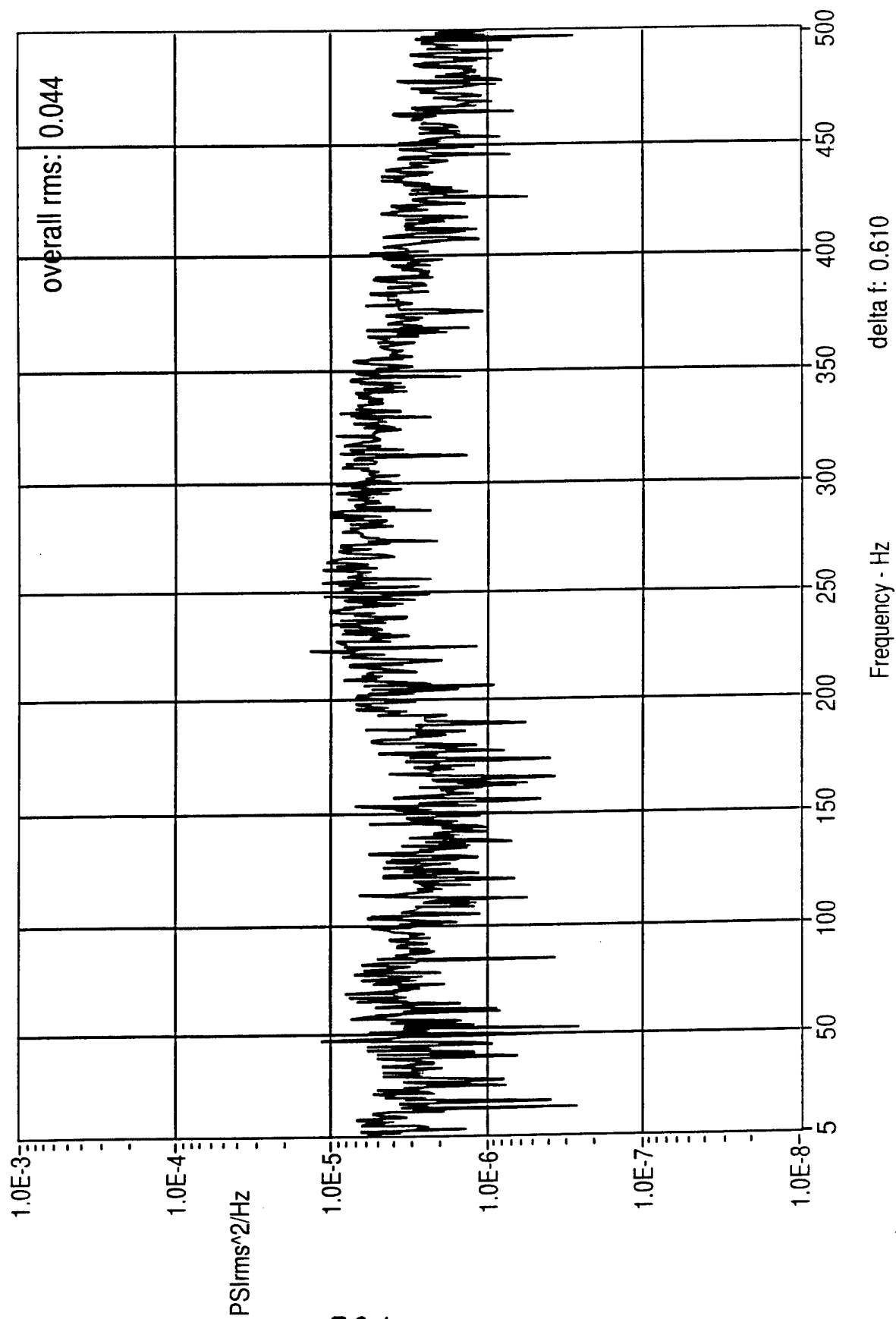
G - I



F-15 TPN\_3341: alpha=24 beta=0 bp=45

# Cross Power Spectrum

G-I

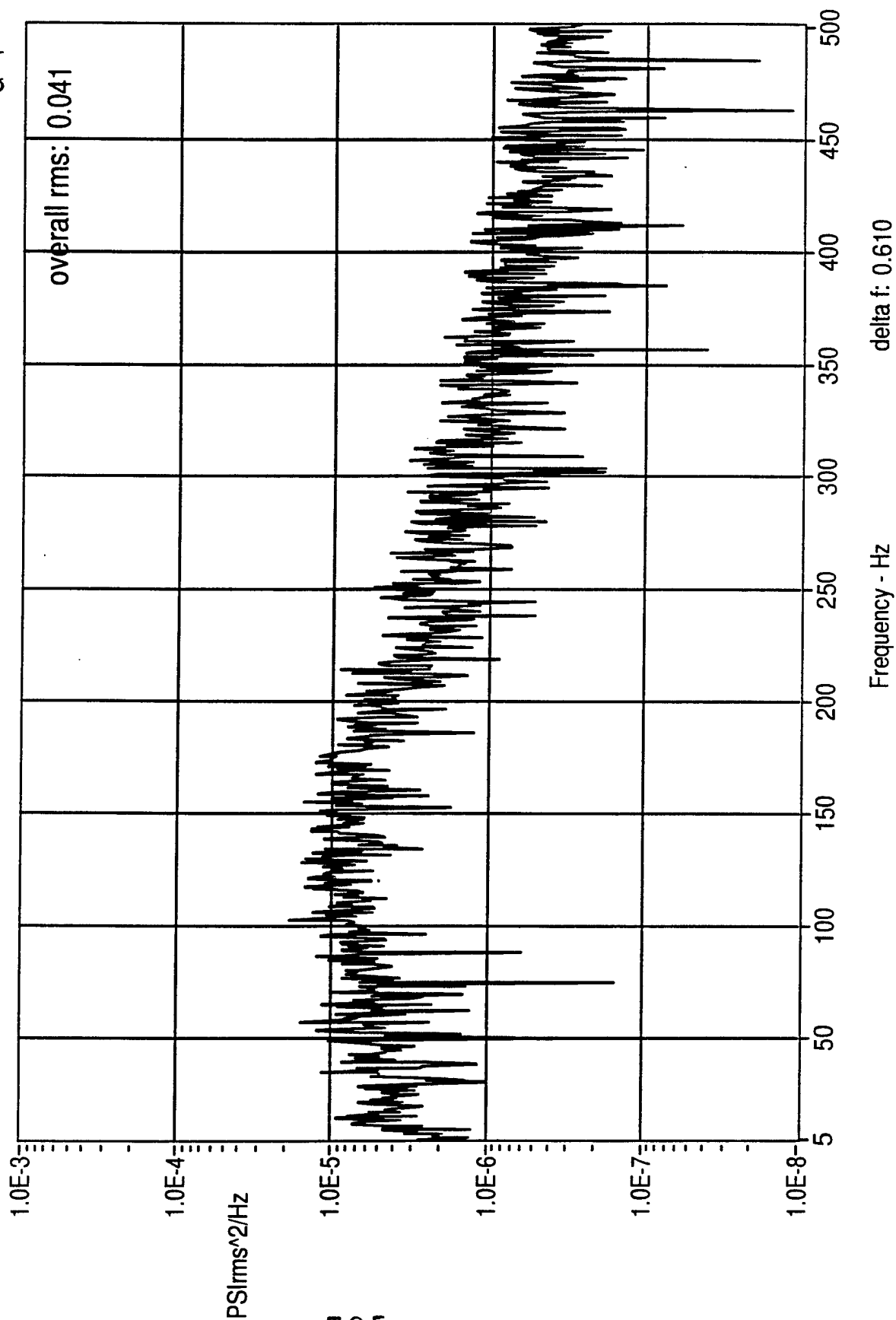




F-15 TPN\_3343: alpha=32 beta=0 bp=45

# Cross Power Spectrum

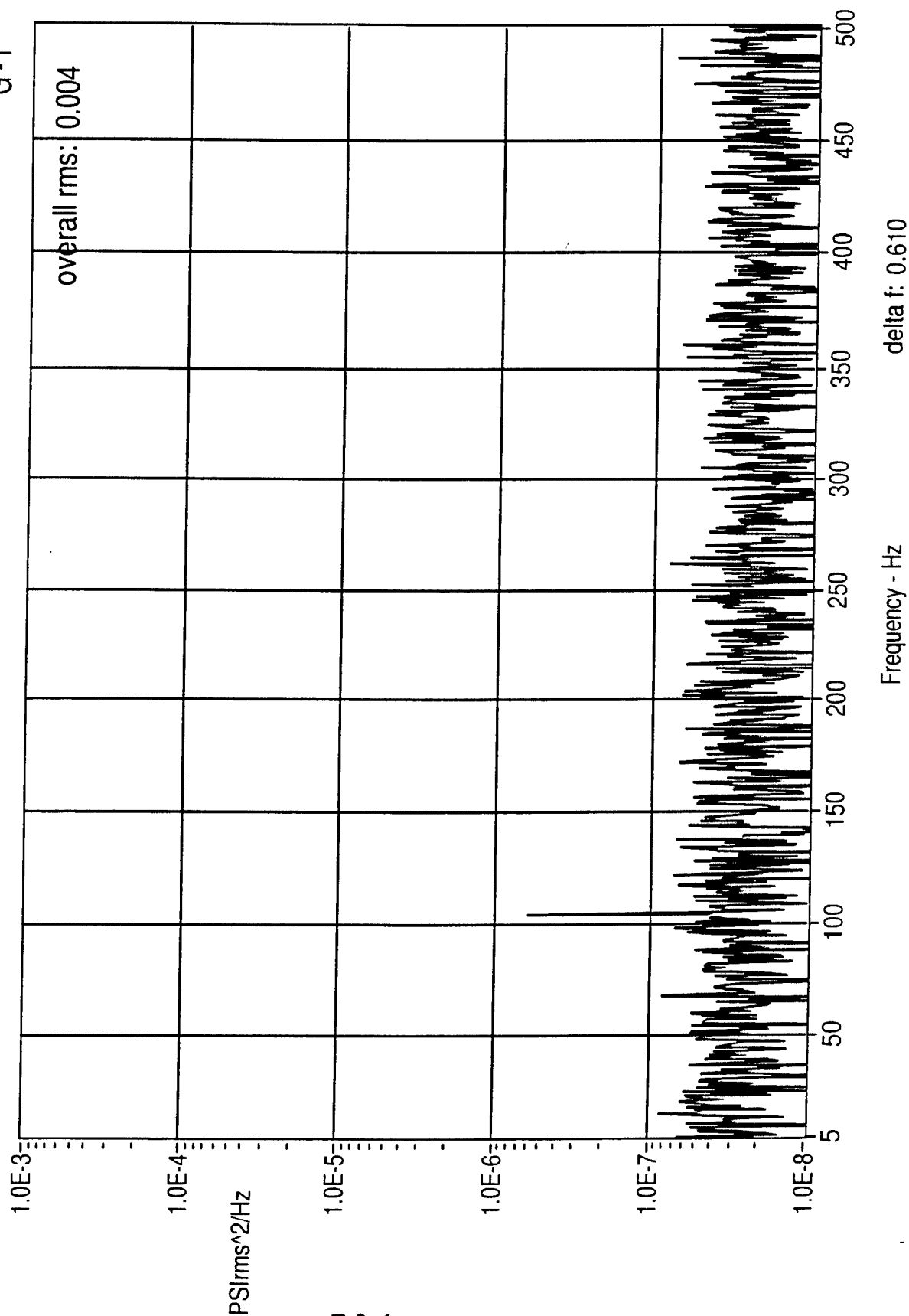
G-I



F-15 TPN\_3369: alpha=8 beta=-4 bp=45

# Cross Power Spectrum

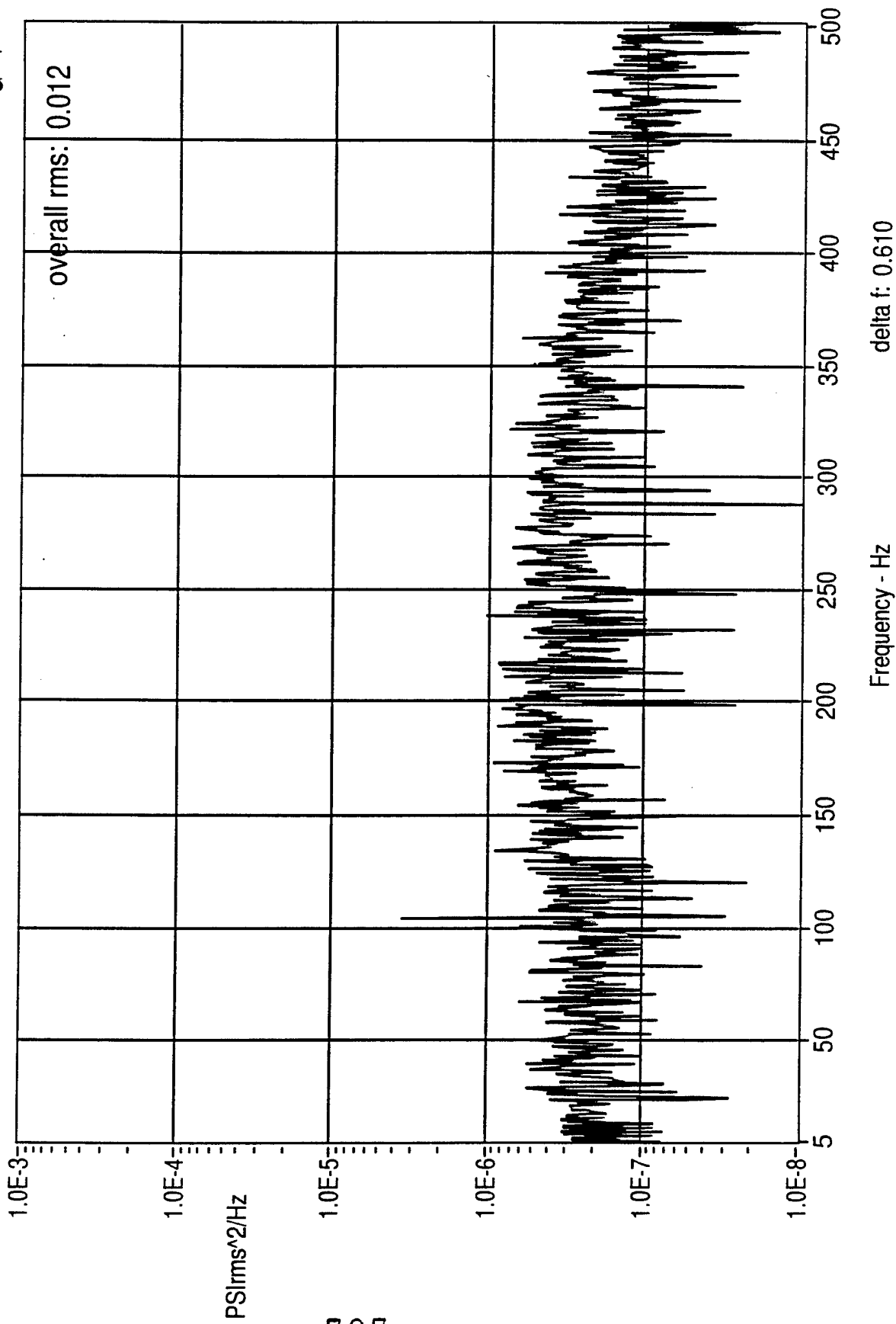
G - I



F-15 TPN\_3375: alpha=20 beta=-4 bp=45

# Cross Power Spectrum

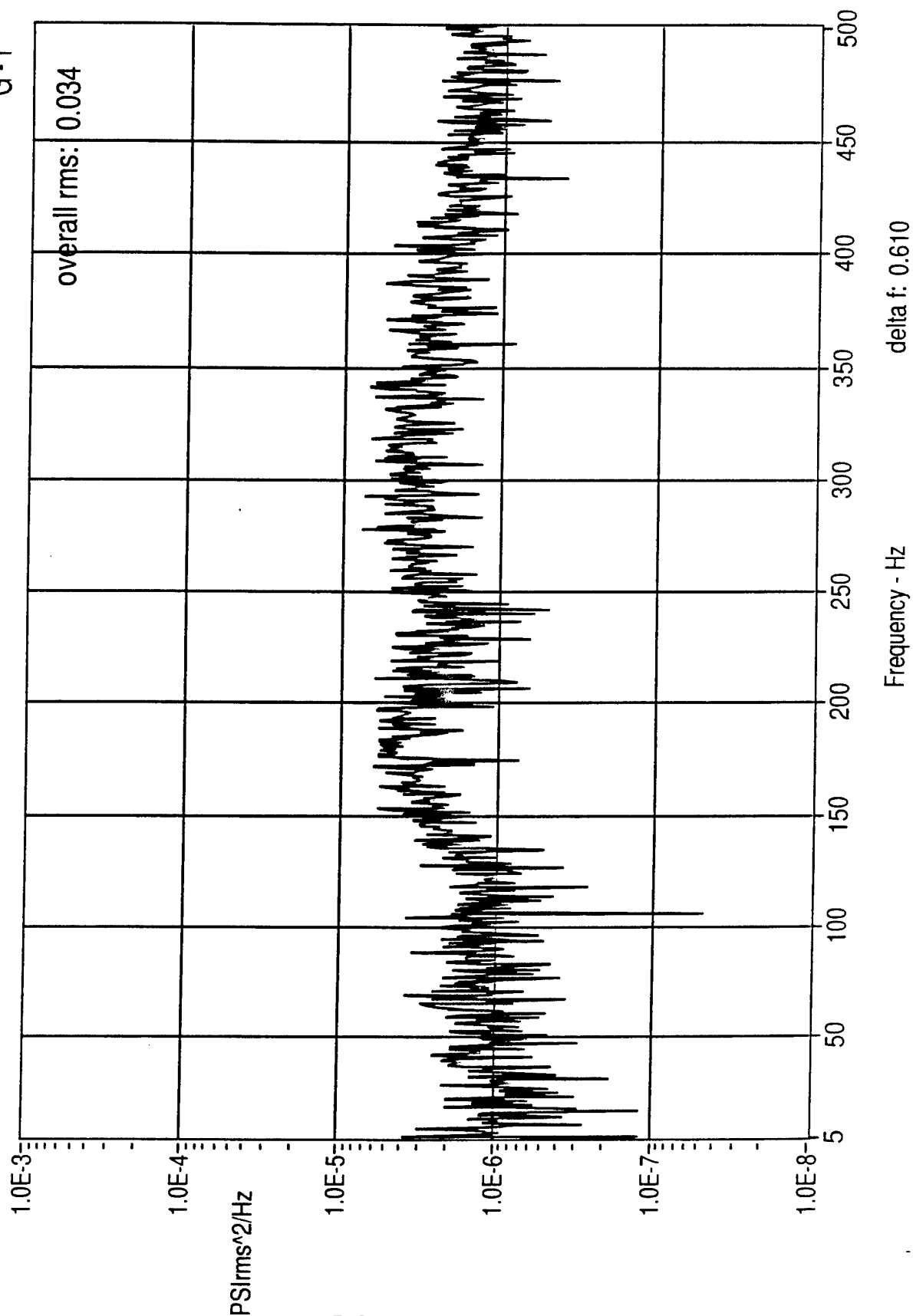
G - I



F-15 TPN\_3377: alpha=24 beta=-4 bp=45

# Cross Power Spectrum

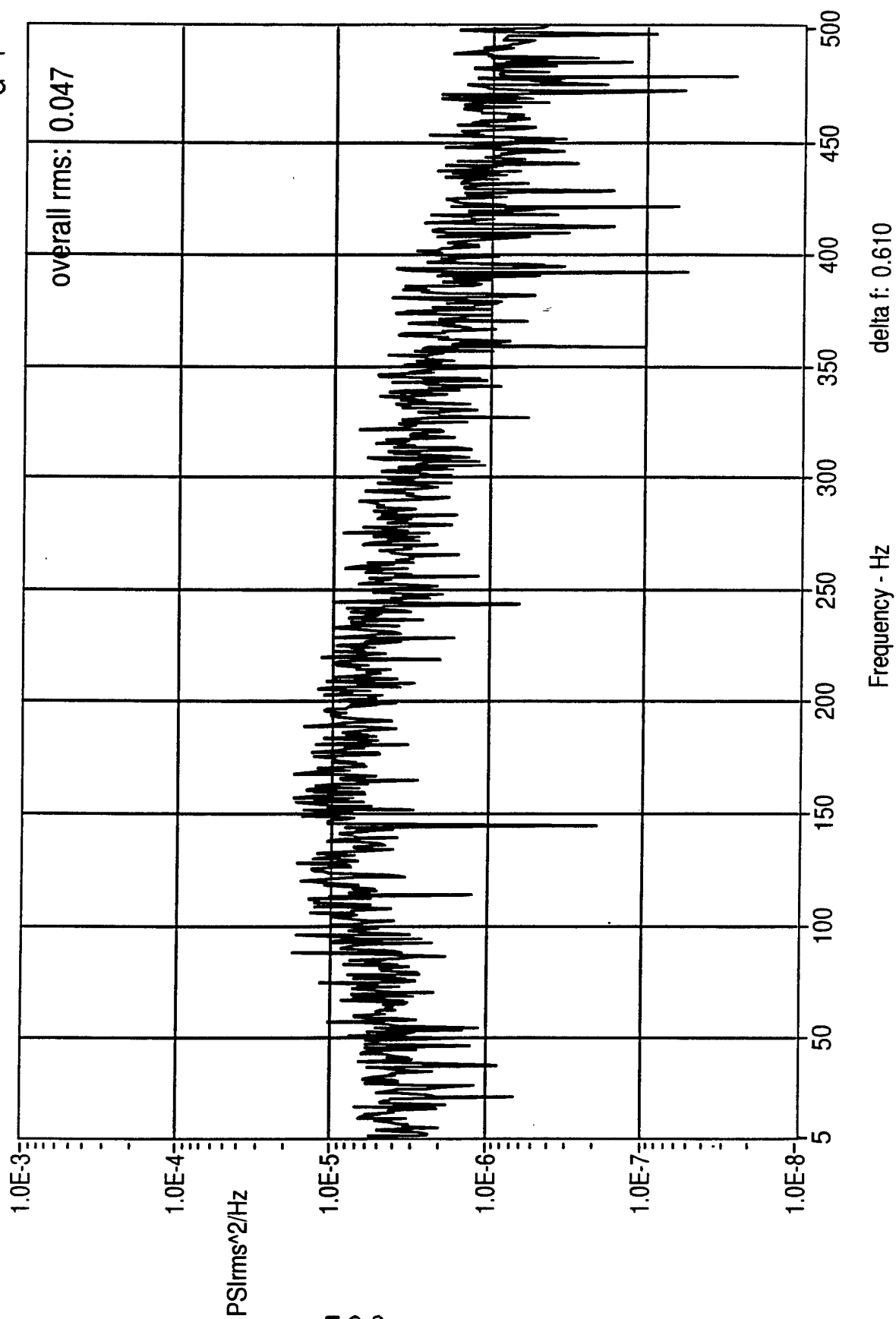
G - I



F-15 TPN\_3379: alpha=32 beta=-4 bp=45

# Cross Power Spectrum

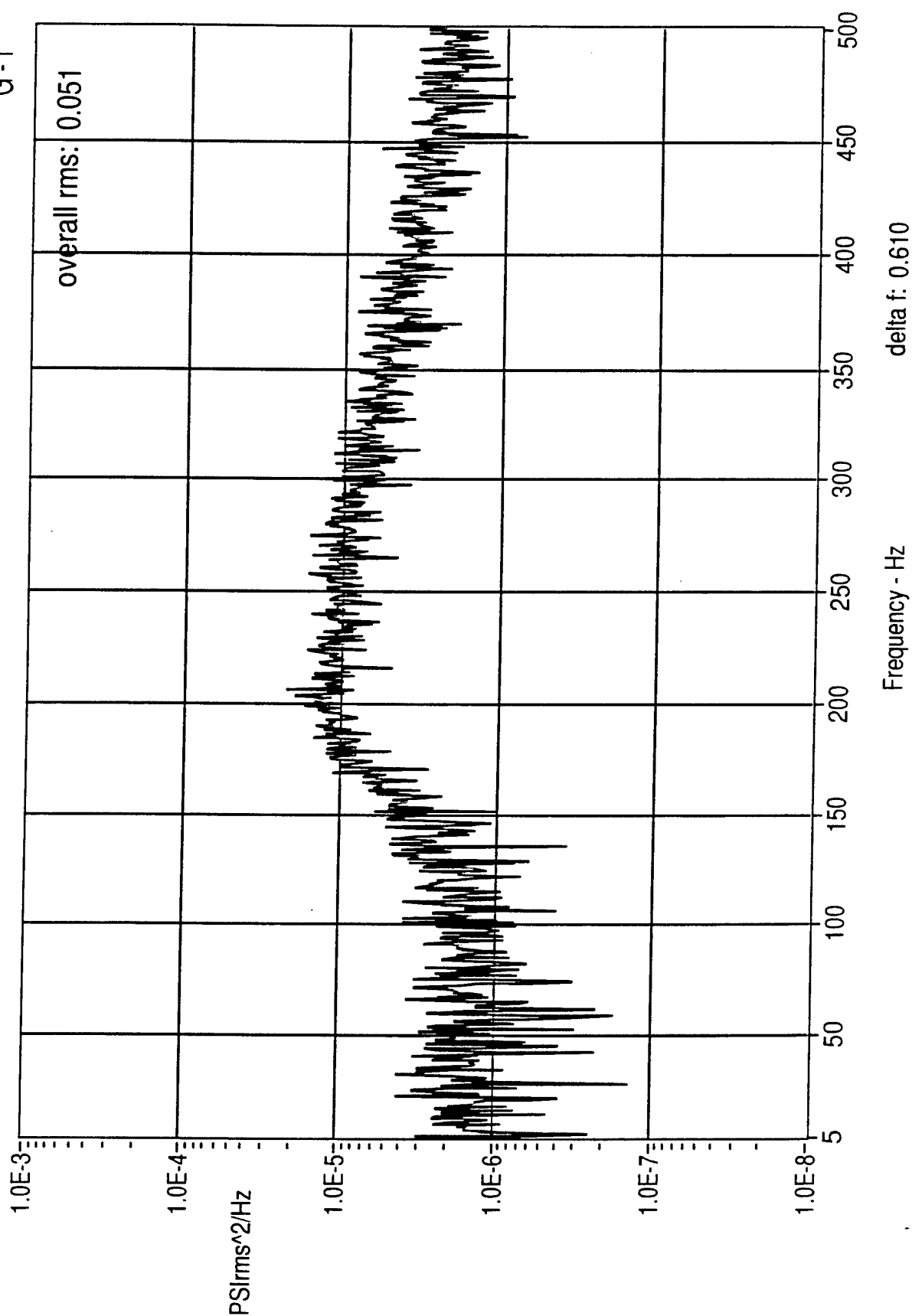
G - I



F-15 TPN\_3046: alpha=20 beta=4 bp=65

# Cross Power Spectrum

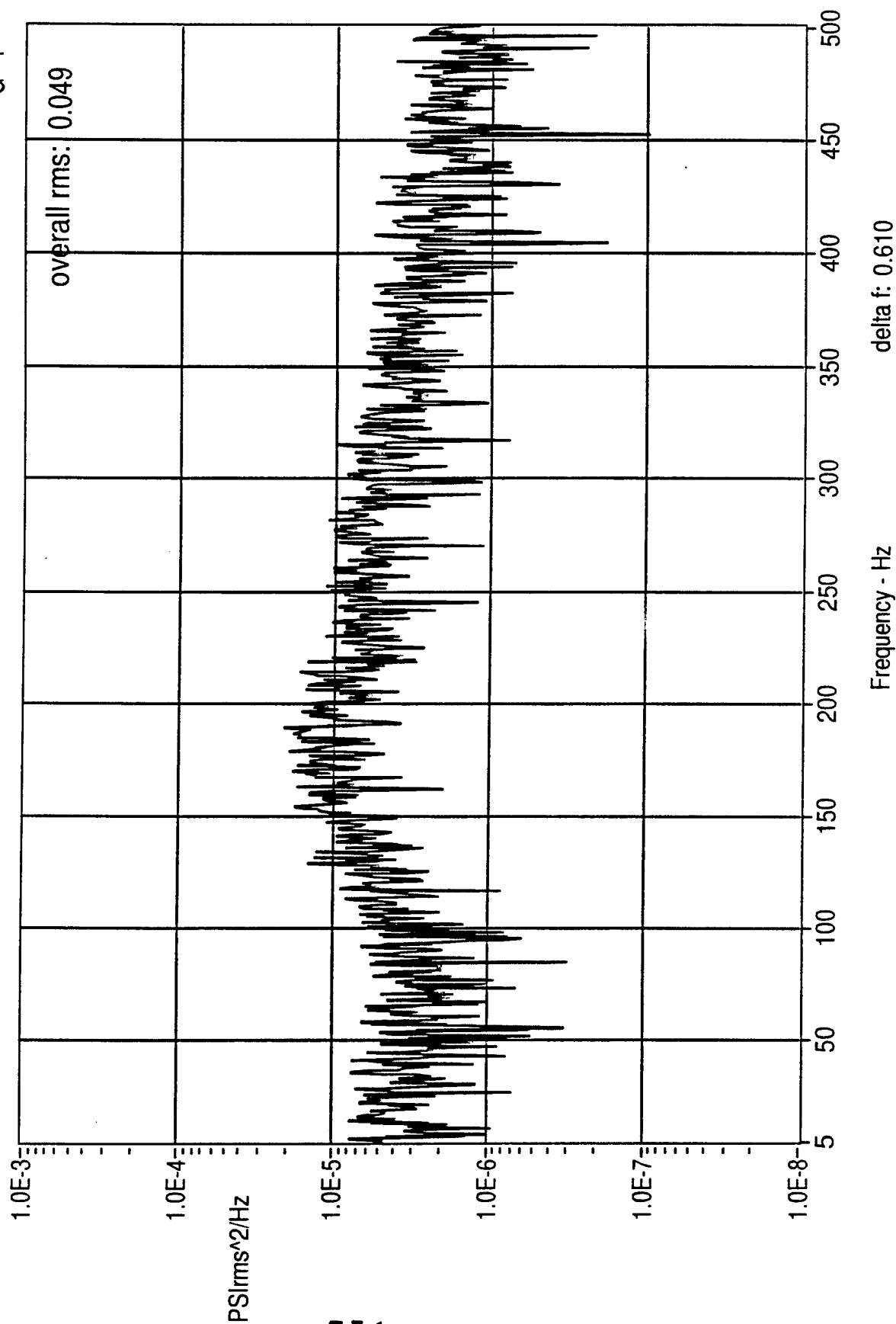
G-I



F-15 TPN\_3048: alpha=24 beta=4 bp=65

# Cross Power Spectrum

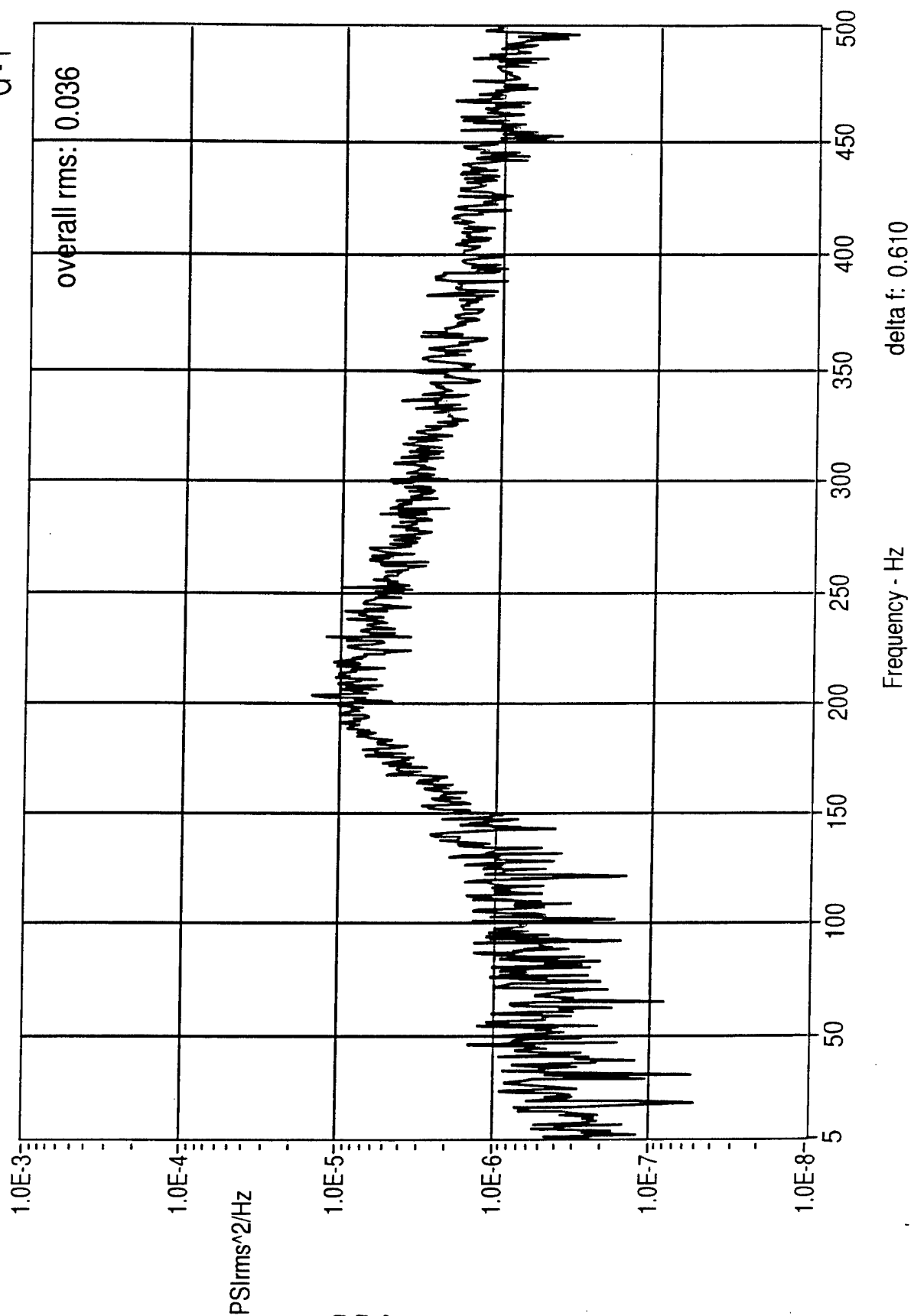
G-I



F-15 TPN\_3040:alpha=20 beta=0 bp=65

# Cross Power Spectrum

G-I

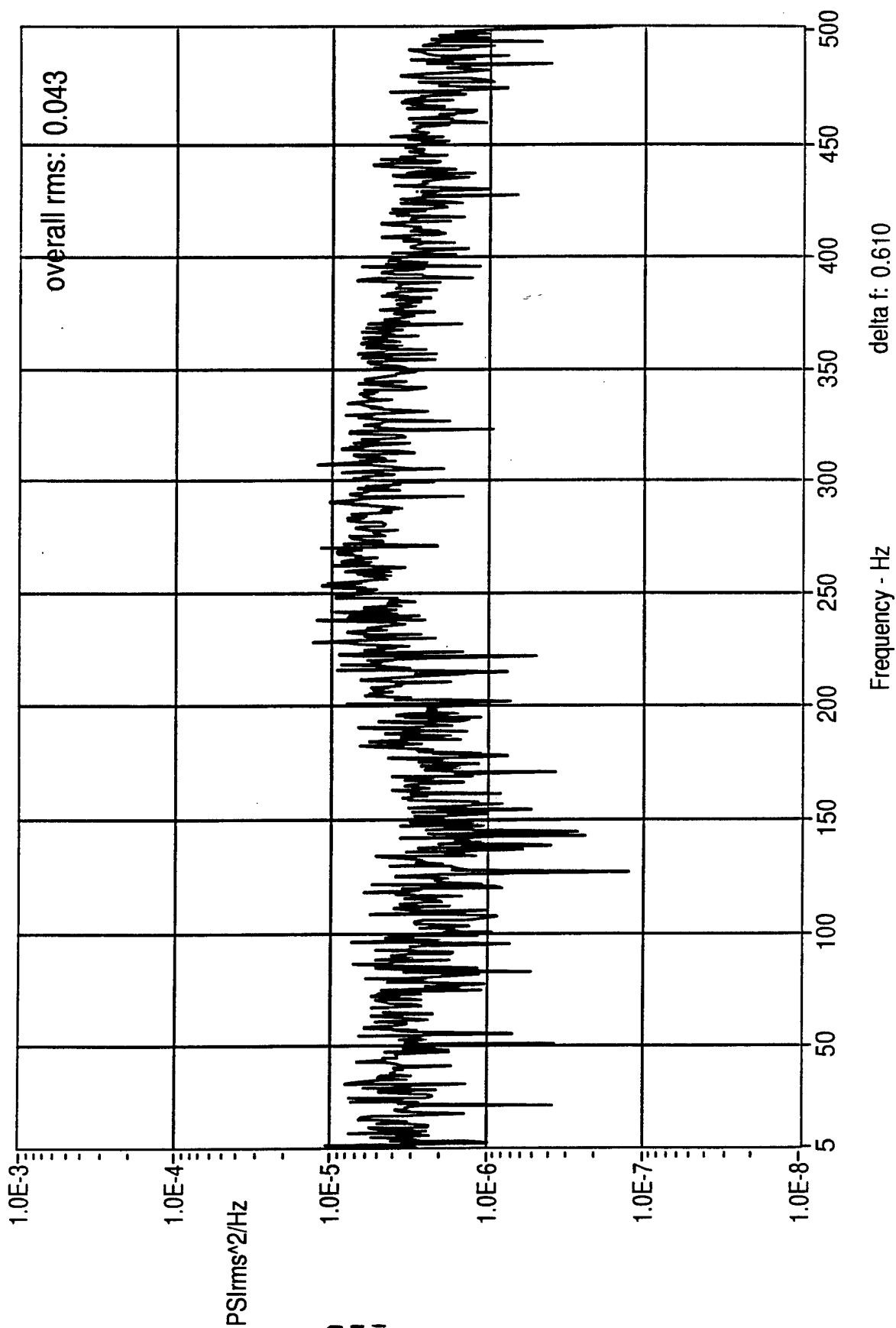




F-15 TPN\_3042: alpha=24 beta=0 bp=65

# Cross Power Spectrum

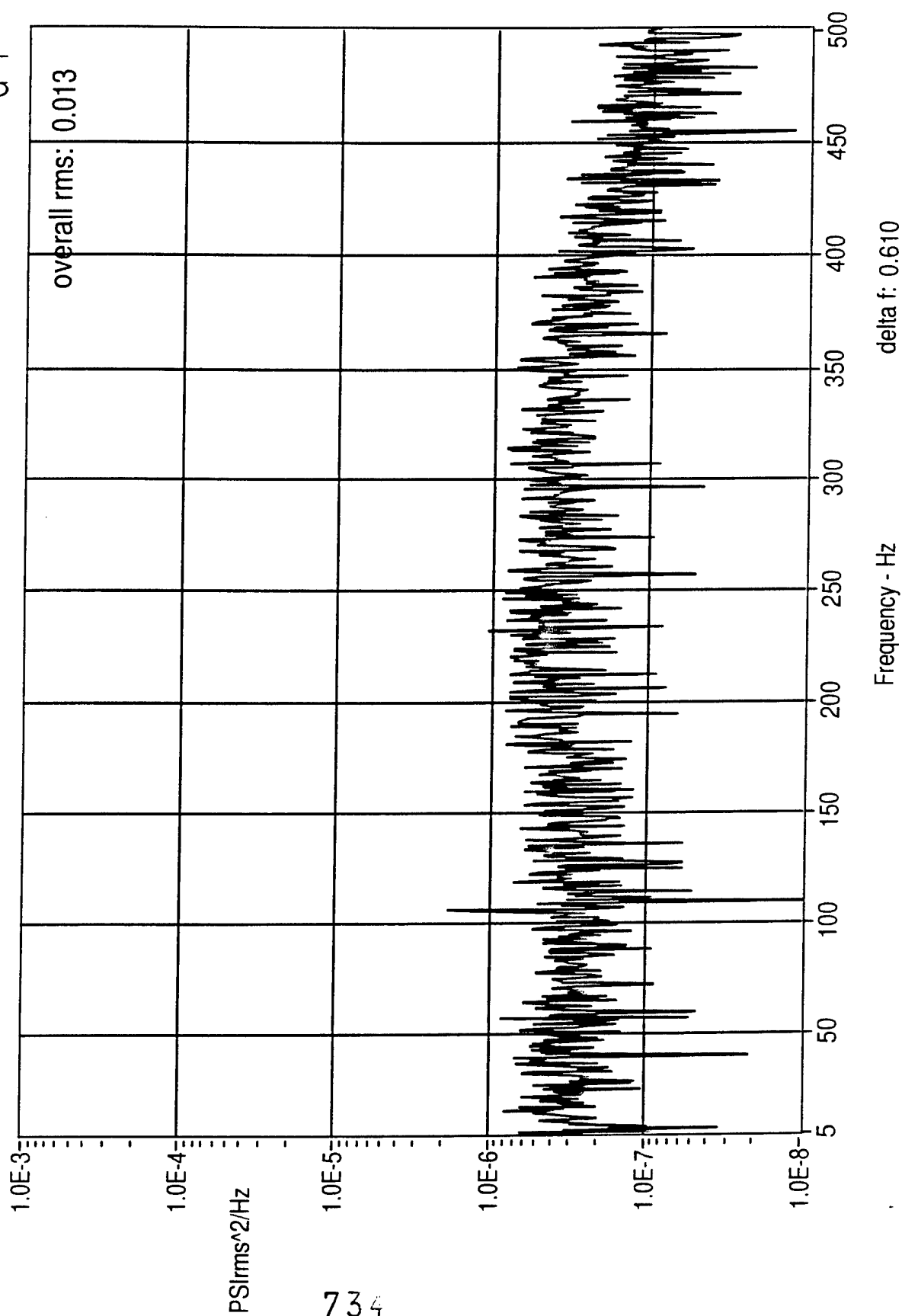
G-I



F-15 TPN\_3034: alpha=20 beta=-4 bp=65

# Cross Power Spectrum

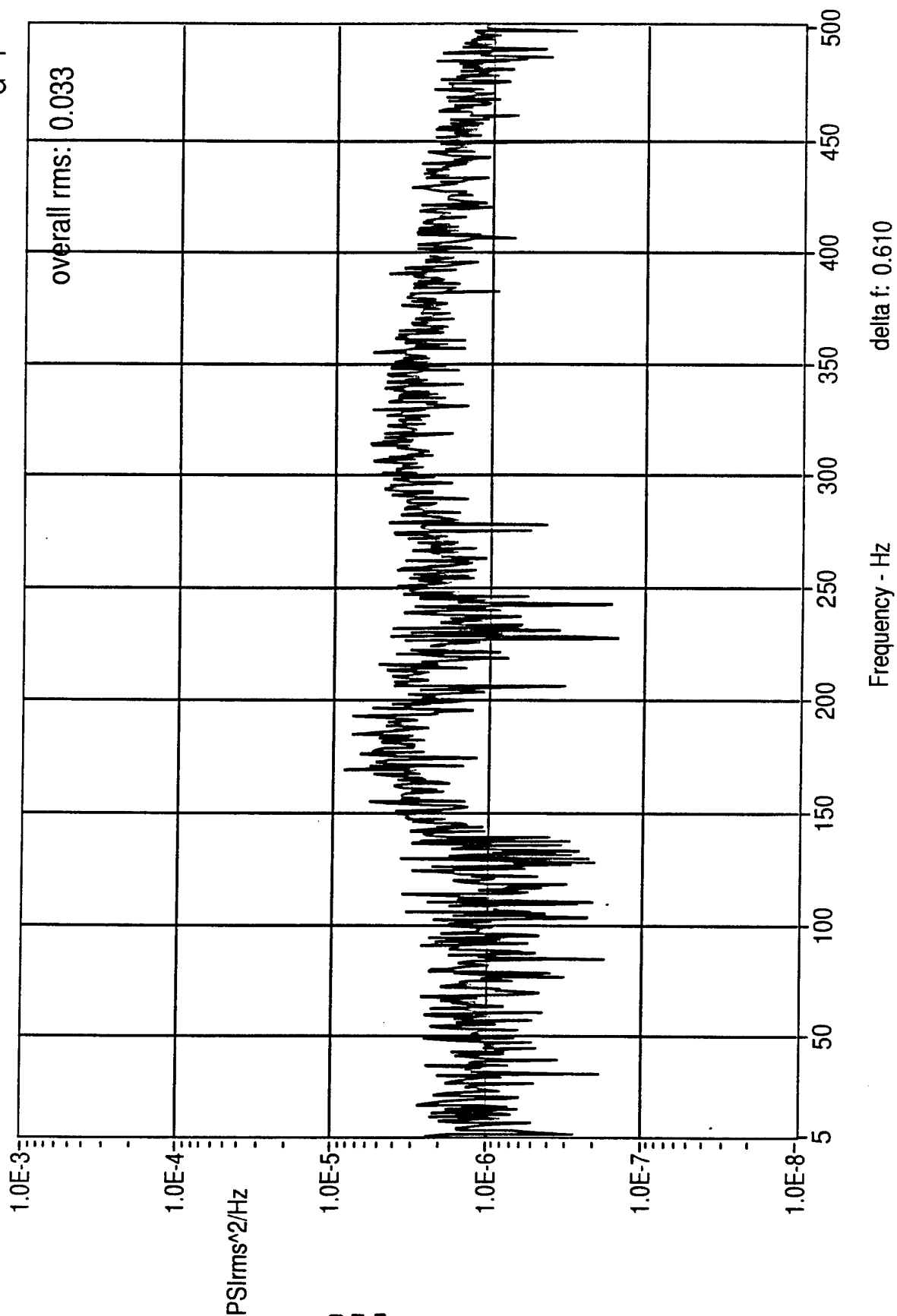
G - I



F-15 TPN\_3036: alpha=24 beta=-4 bp=65

# Cross Power Spectrum

G - I



**CSD GRAPHS**  
**Q= 56 PSF**

**2.3.2 RMS SUMMARY TABS OF CSD MAGNITUDES**

**F-15 Vertical Tail Buffet Test: Overall RMS of Cross PSDs (psi, 5-500 Hz, 56 psf)**

**0 psi blowing pressure:**

**Beta = 4:**

		K-H	K-I	K-J	K-G	G-H	G-I
Alpha:	8	.004	.004	.004	.003	.003	.003
	20	.108	.090	.067	.078	.061	.051
	24	.127	.074	.103	.107	.074	.047
	32	.071	.050	.054	.065	.056	.040

**Beta = 0:**

		K-H	K-I	K-J	K-G	G-H	G-I
Alpha:	8	.013	.009	.005	.004	.004	.003
	20	.068	.062	.050	.059	.035	.034
	24	.118	.074	.070	.103	.061	.044
	32	.096	.063	.080	.089	.071	.045

**Beta = -4:**

		K-H	K-I	K-J	K-G	G-H	G-I
Alpha:	8	.006	.008	.007	.004	.003	.004
	20	.012	.020	.012	.013	.014	.011
	24	.066	.050	.041	.064	.044	.032
	32	.118	.071	.102	.116	.080	.047

**45 psi blowing pressure:**

**Beta = 4:**

		K-H	K-I	K-J	K-G	G-H	G-I
Alpha:	8	.004	.004	.003	.003	.003	.003
	20	.102	.088	.065	.074	.059	.050
	24	.130	.078	.100	.108	.074	.048
	32	.073	.050	.055	.064	.058	.040

**Beta = 0:**

		K-H	K-I	K-J	K-G	G-H	G-I
Alpha:	8	.010	.007	.004	.004	.004	.003
	20	.063	.060	.052	.060	.035	.035
	24	.113	.072	.067	.101	.059	.044
	32	.080	.055	.069	.072	.062	.041

**Beta = -4:**

		K-H	K-I	K-J	K-G	G-H	G-I
Alpha:	8	.004	.007	.006	.004	.003	.004
	20	.015	.021	.018	.017	.015	.012
	24	.070	.052	.044	.067	.047	.034
	32	.104	.067	.088	.098	.072	.047

psi blowing pressure:

Beta = 4:

Alpha:

8  
20  
24  
32

K-H	K-I	K-J	K-G	G-H	G-I
.105	.090	.064	.075	.059	.051
.135	.081	.106	.111	.077	.049

Beta = 0:

Alpha:

8  
20  
24  
32

K-H	K-I	K-J	K-G	G-H	G-I
.062	.060	.052	.061	.035	.036
.113	.073	.067	.101	.059	.043

Beta = -4:

Alpha:

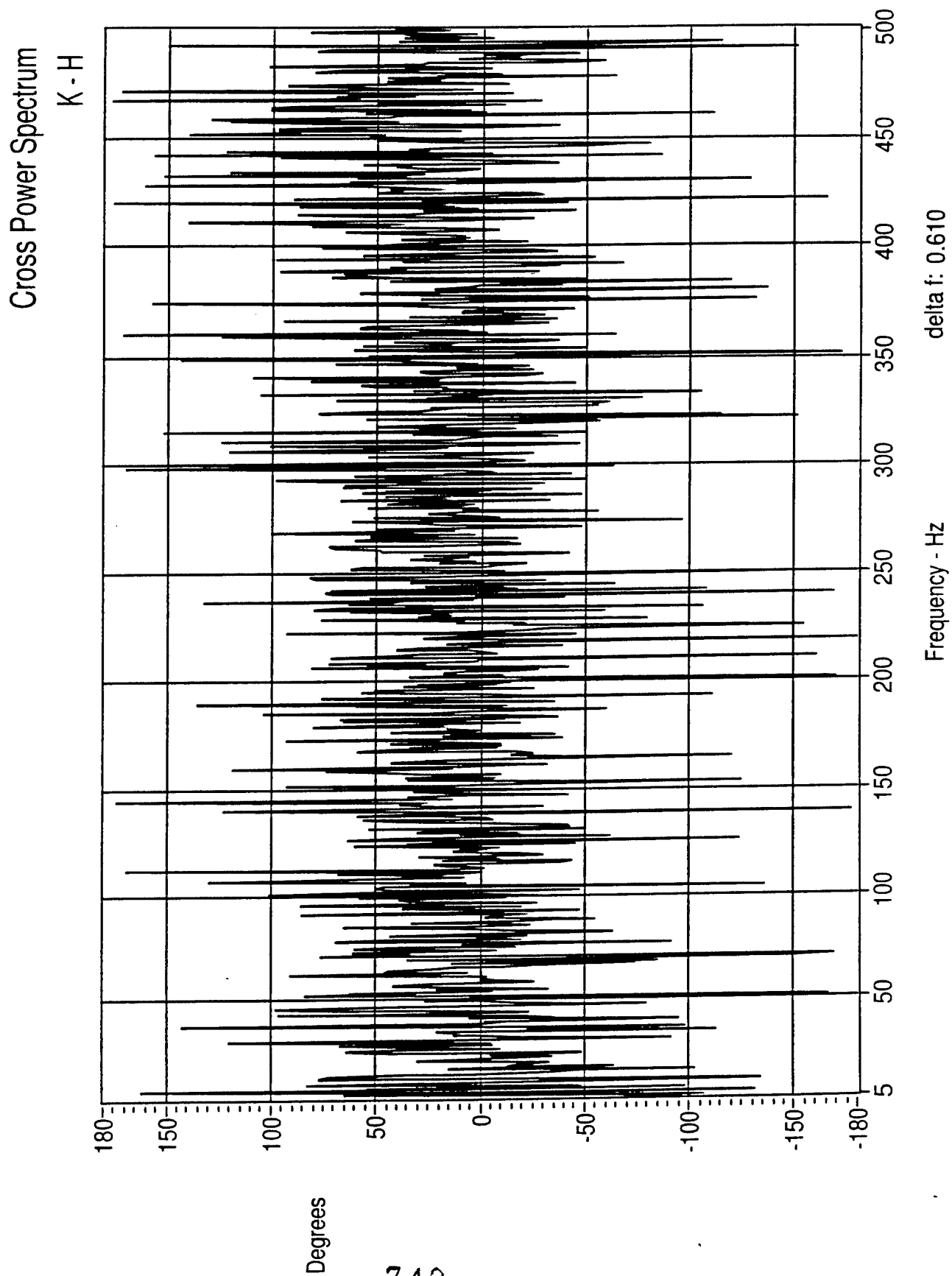
8  
20  
24  
32

K-H	K-I	K-J	K-G	G-H	G-I
.020	.025	.021	.021	.017	.013
.066	.048	.043	.065	.047	.033

**CSD GRAPHS**  
**Q= 56 PSF**

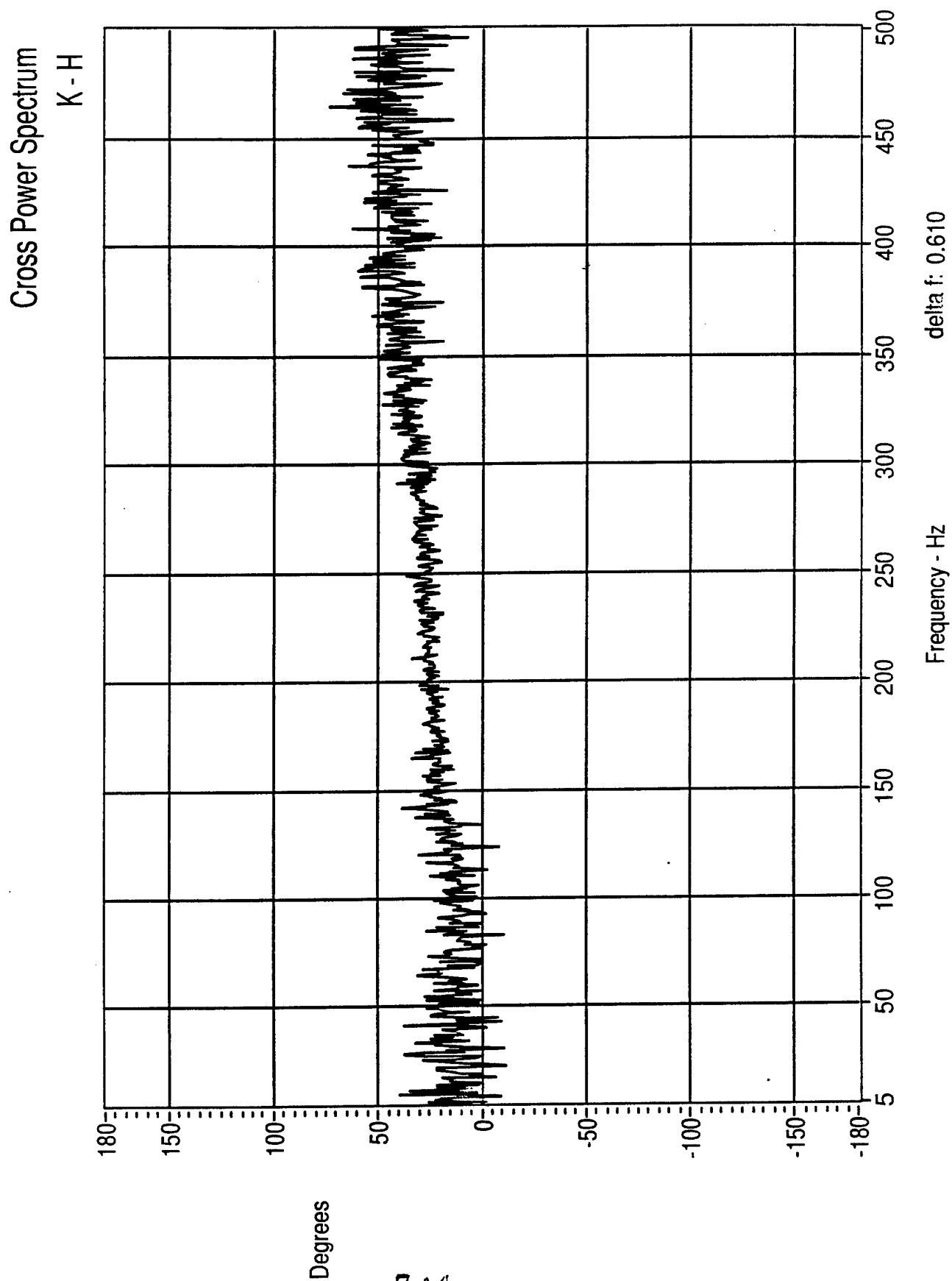
**2.3.3 CSD PHASE GRAPHS**

F-15 TPN\_2918: alpha=8 beta=4 bp=0

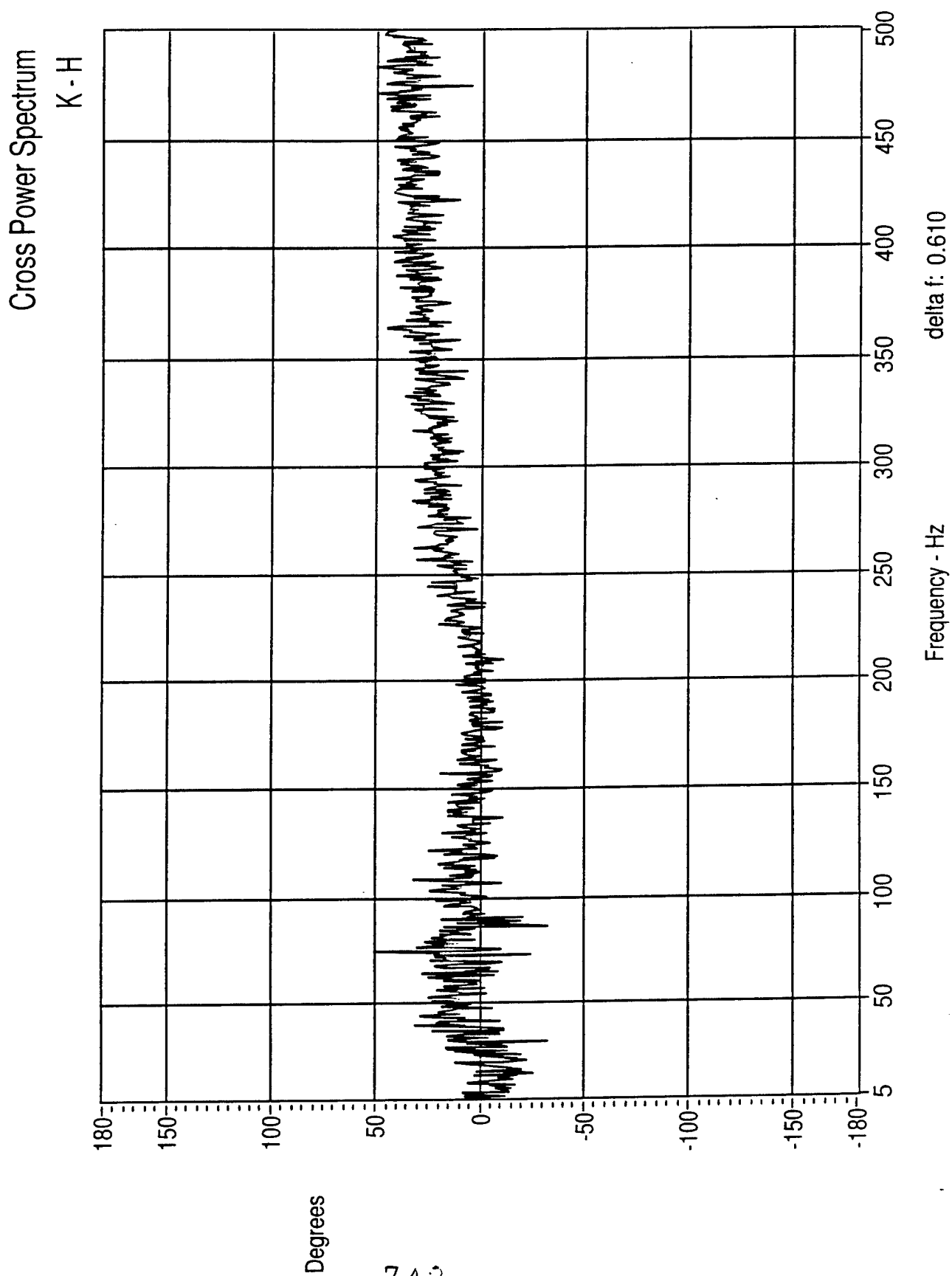




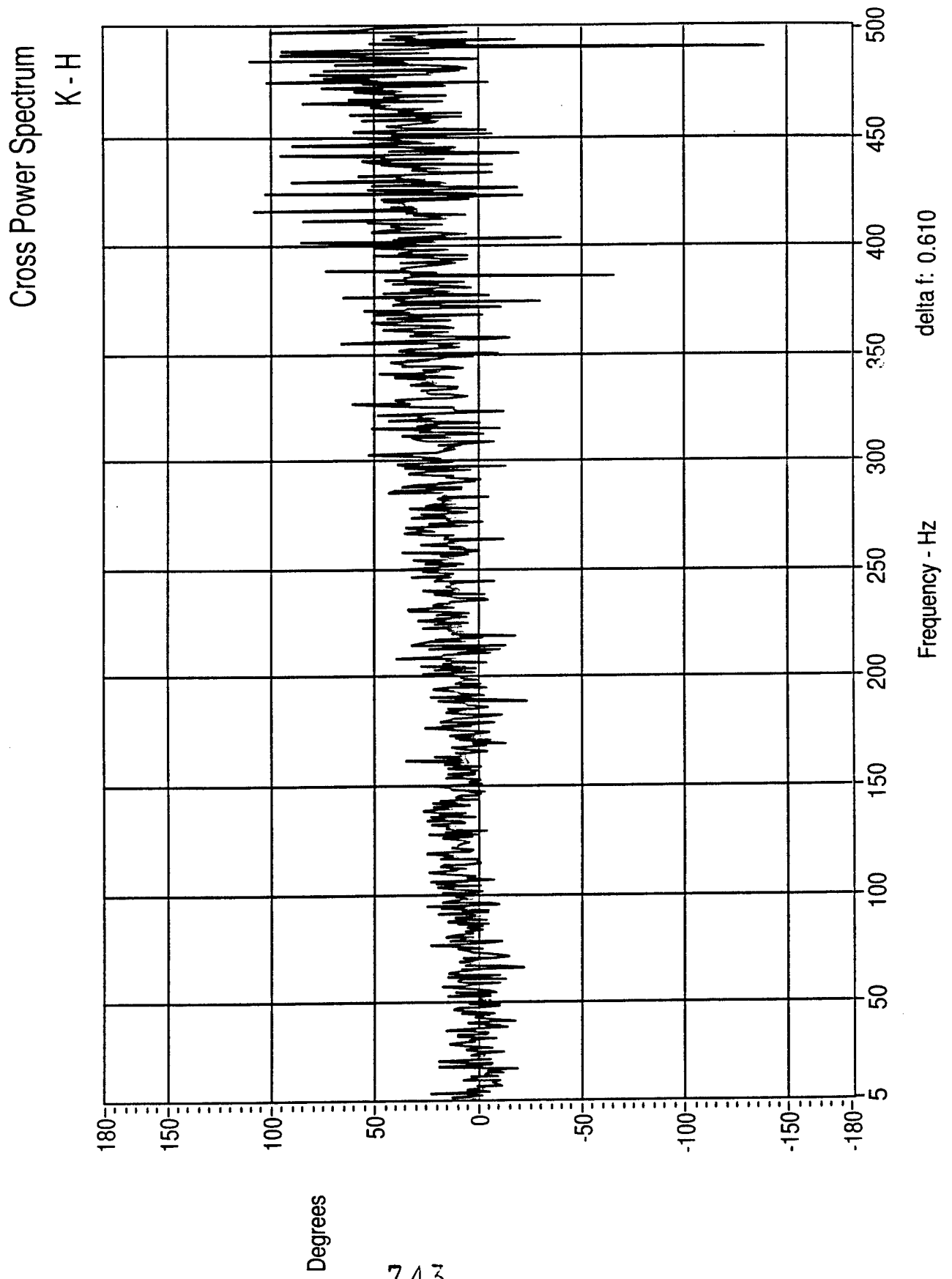
F-15 TPN\_2924: alpha=20 beta=4 bp=0



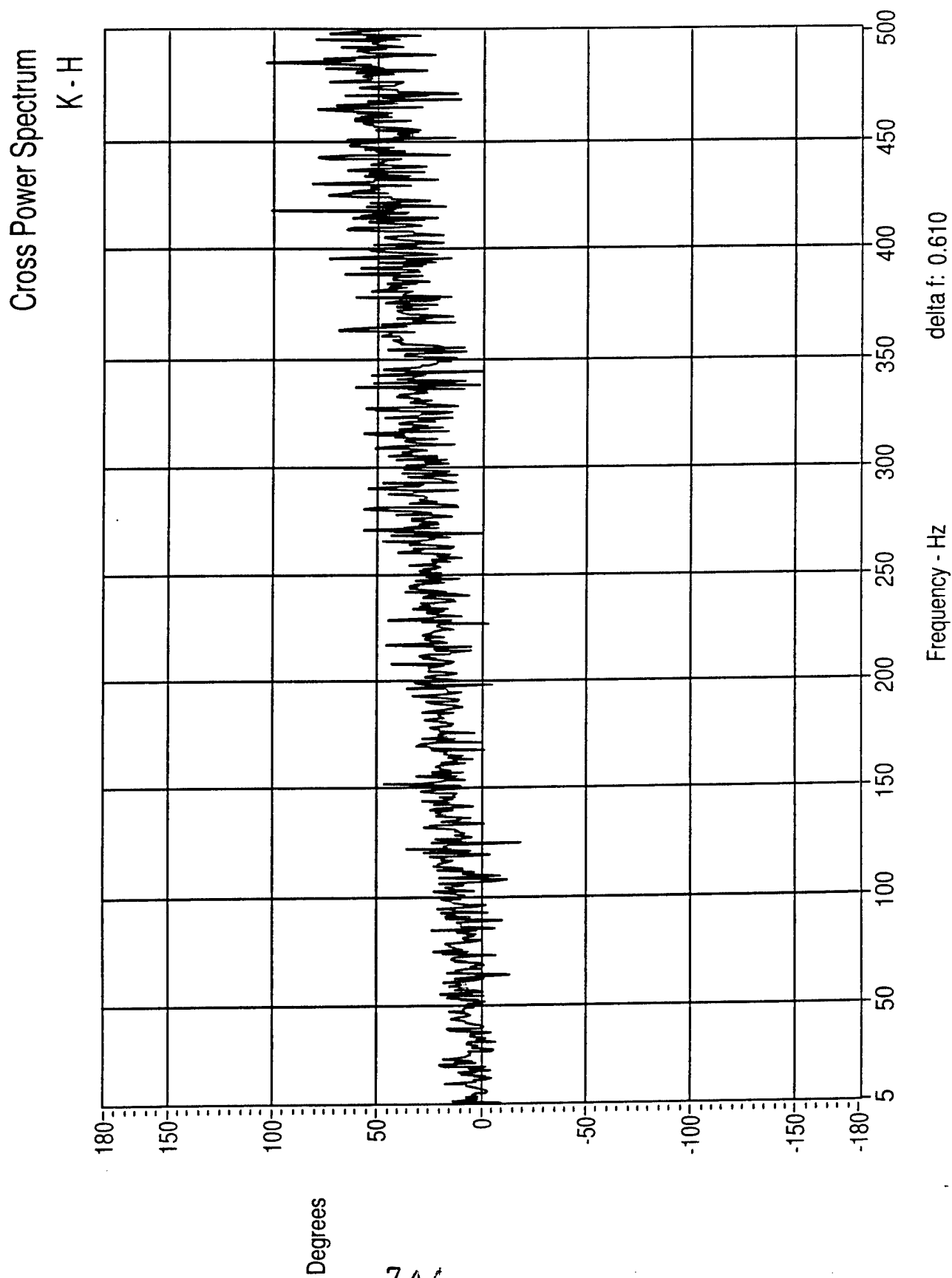
F-15 TPN\_2926: alpha=24 beta=4 bp=0



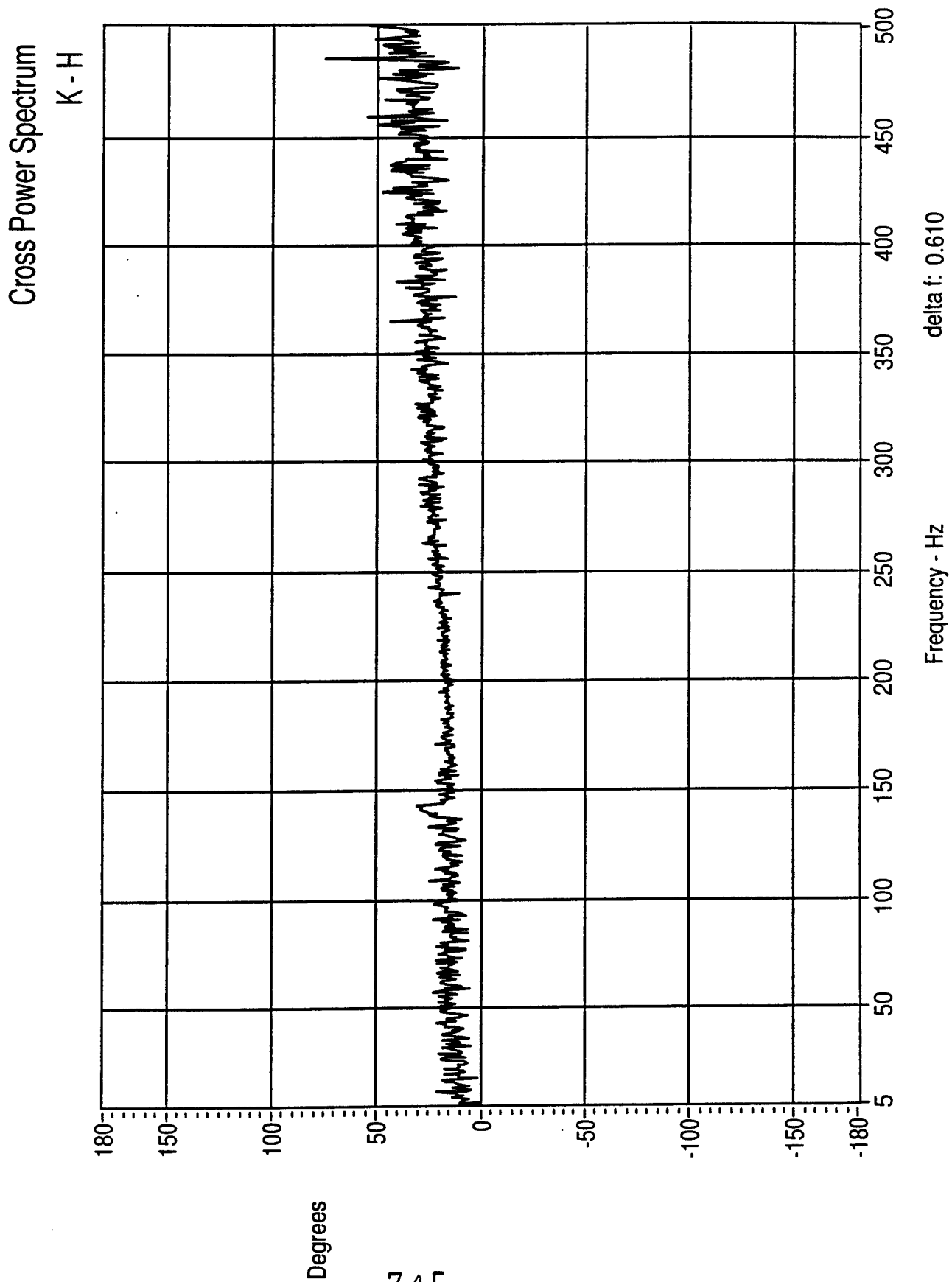
F-15 TPN\_2928: alpha=32 beta=4 bp=0



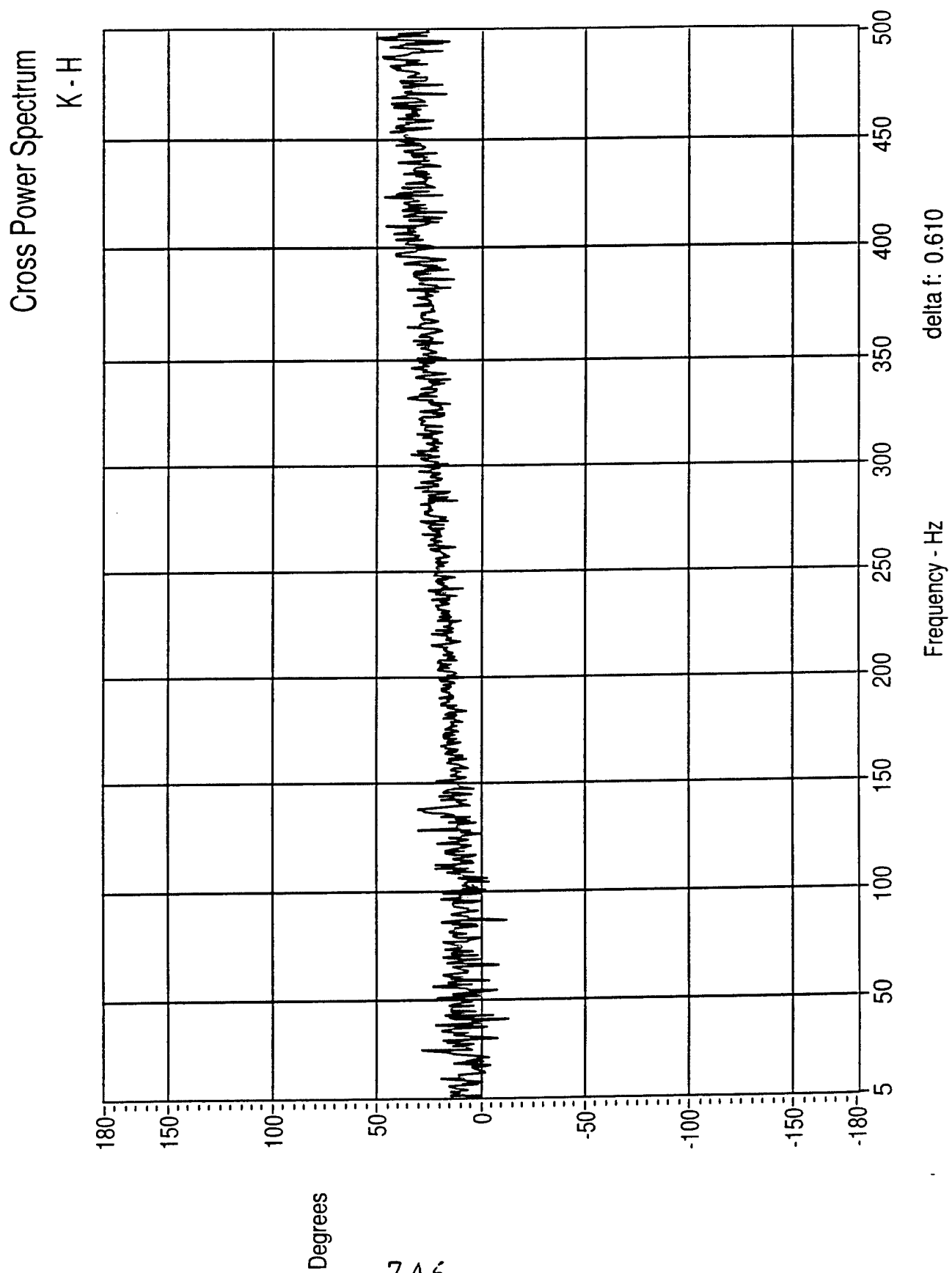
F-15 TPN\_2844: alpha=8 beta=0 bp=0



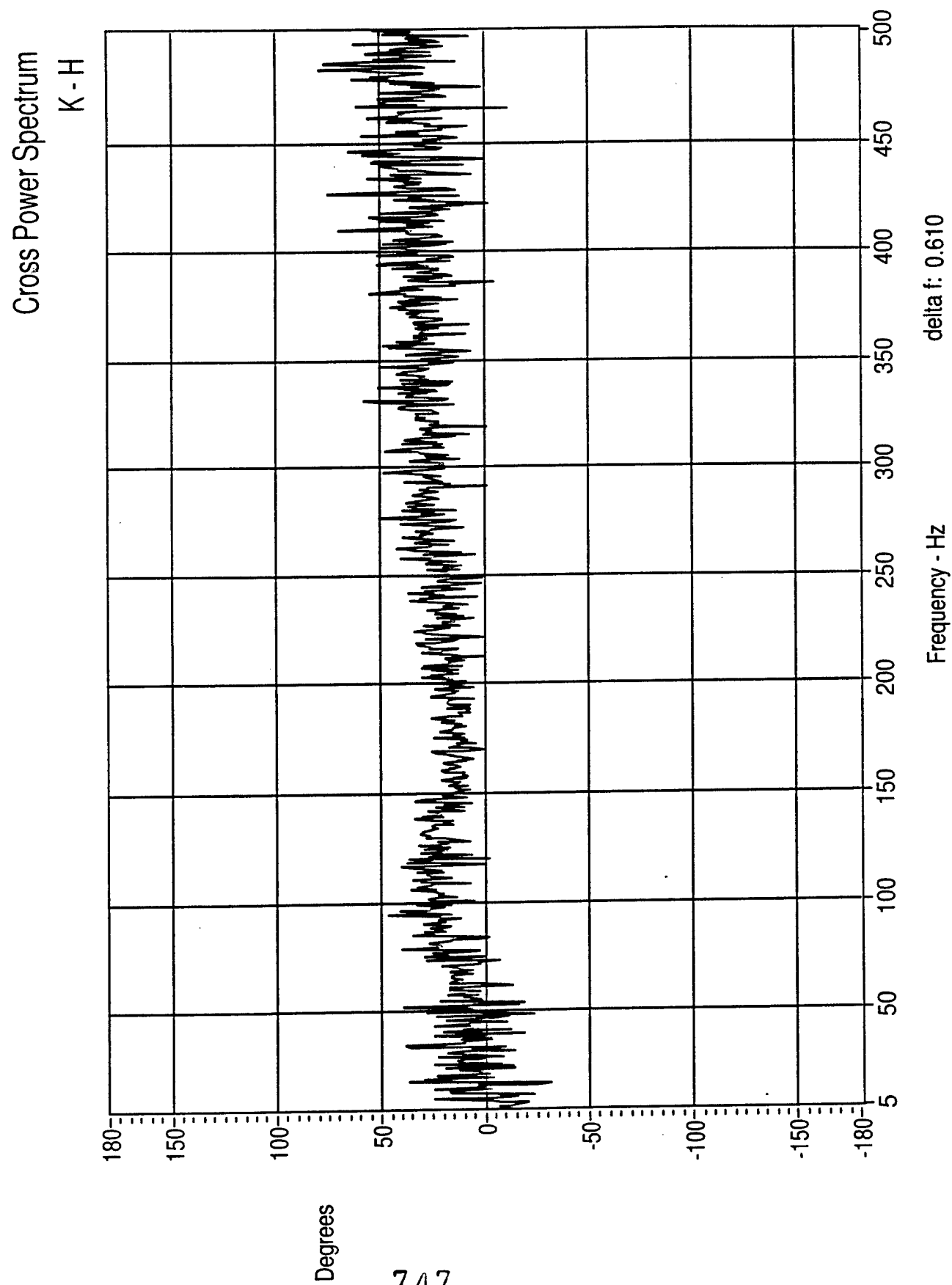
F-15 TPN\_2850: alpha=20 beta=0 bp=0



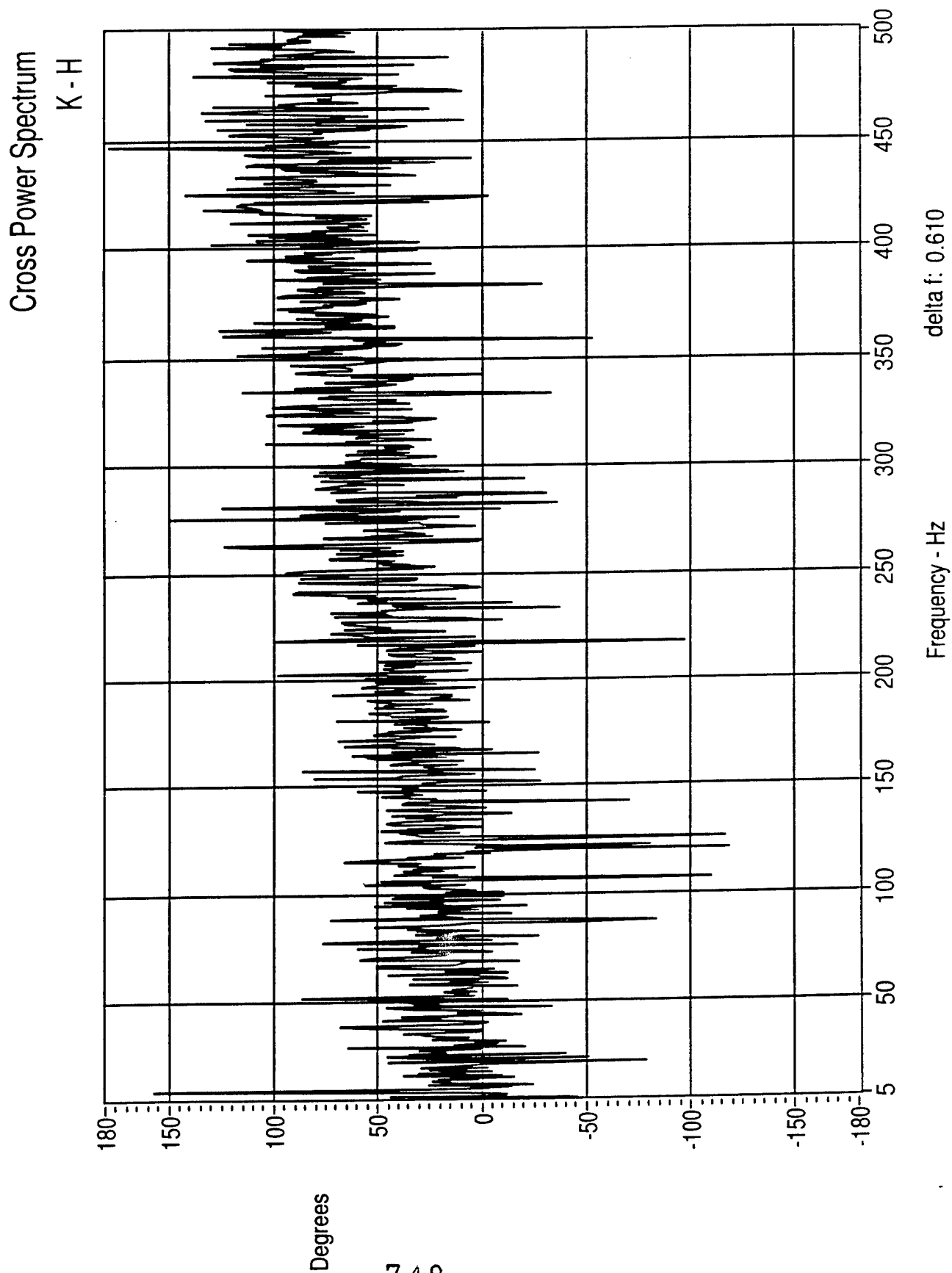
F-15 TPN\_2852: alpha=24 beta=0 bp=0



F-15 TPN\_2854: alpha=32 beta=0 bp=0

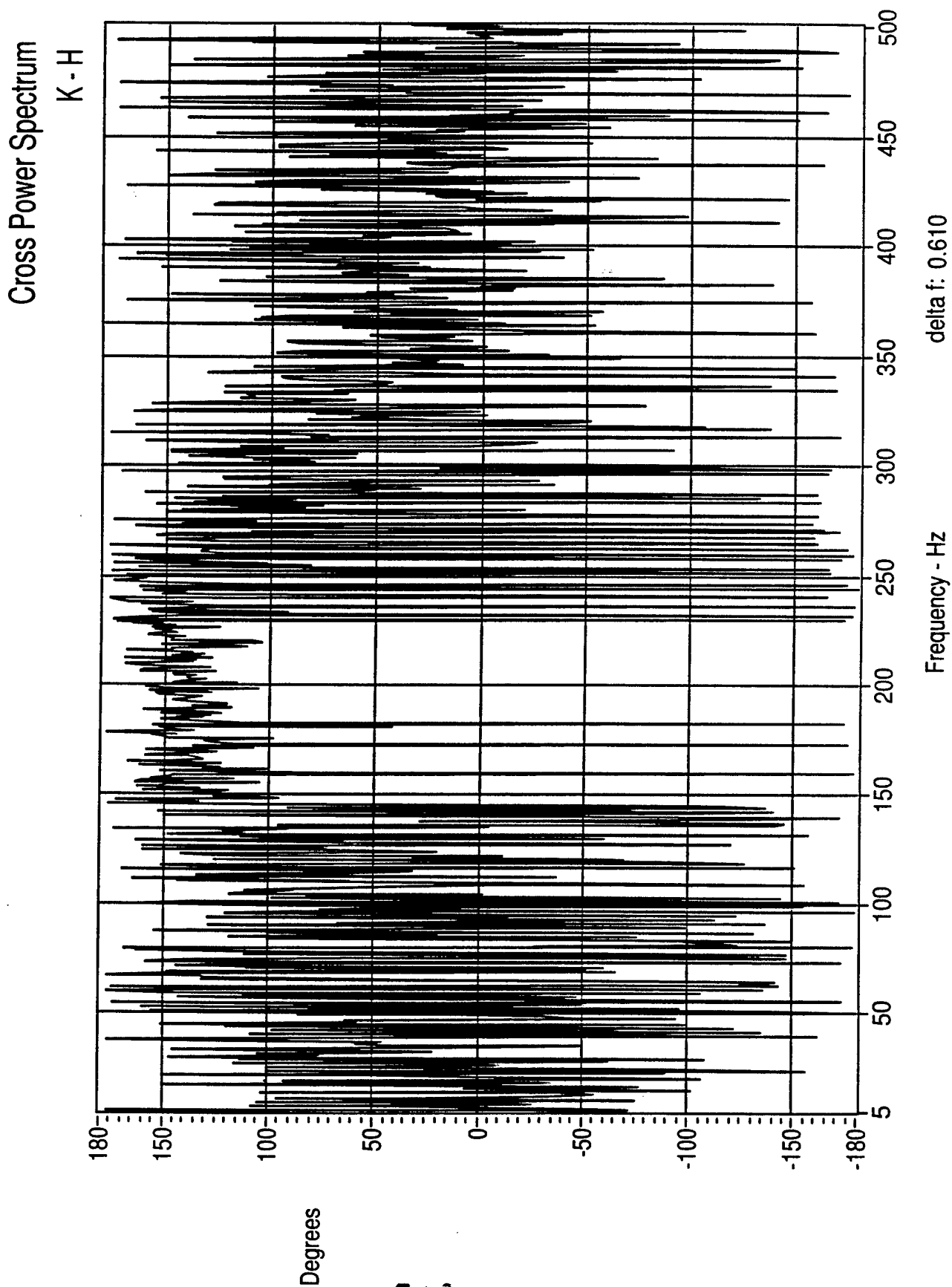


F-15 TPN\_2864: alpha=8 beta=-4 bp=0

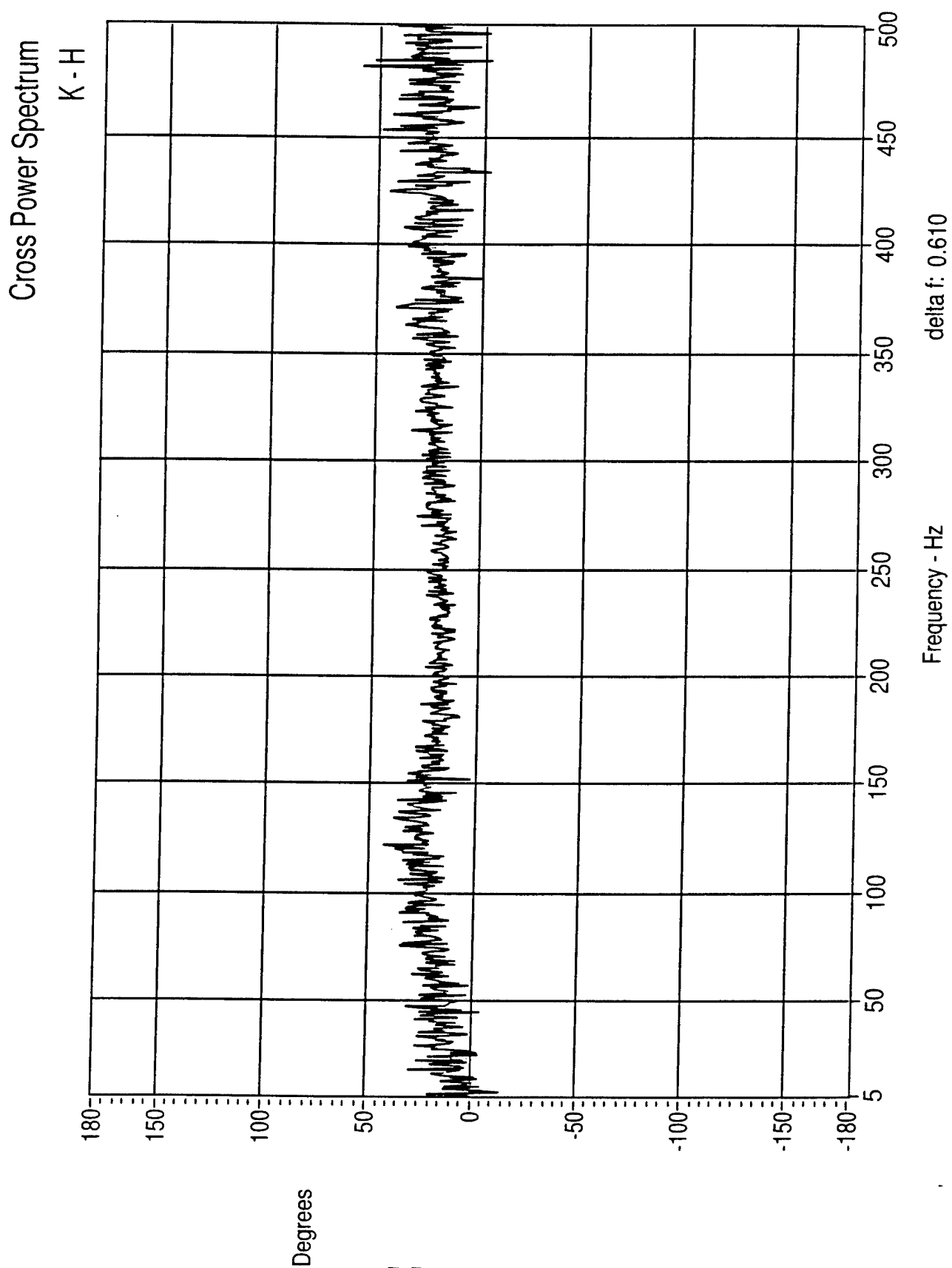




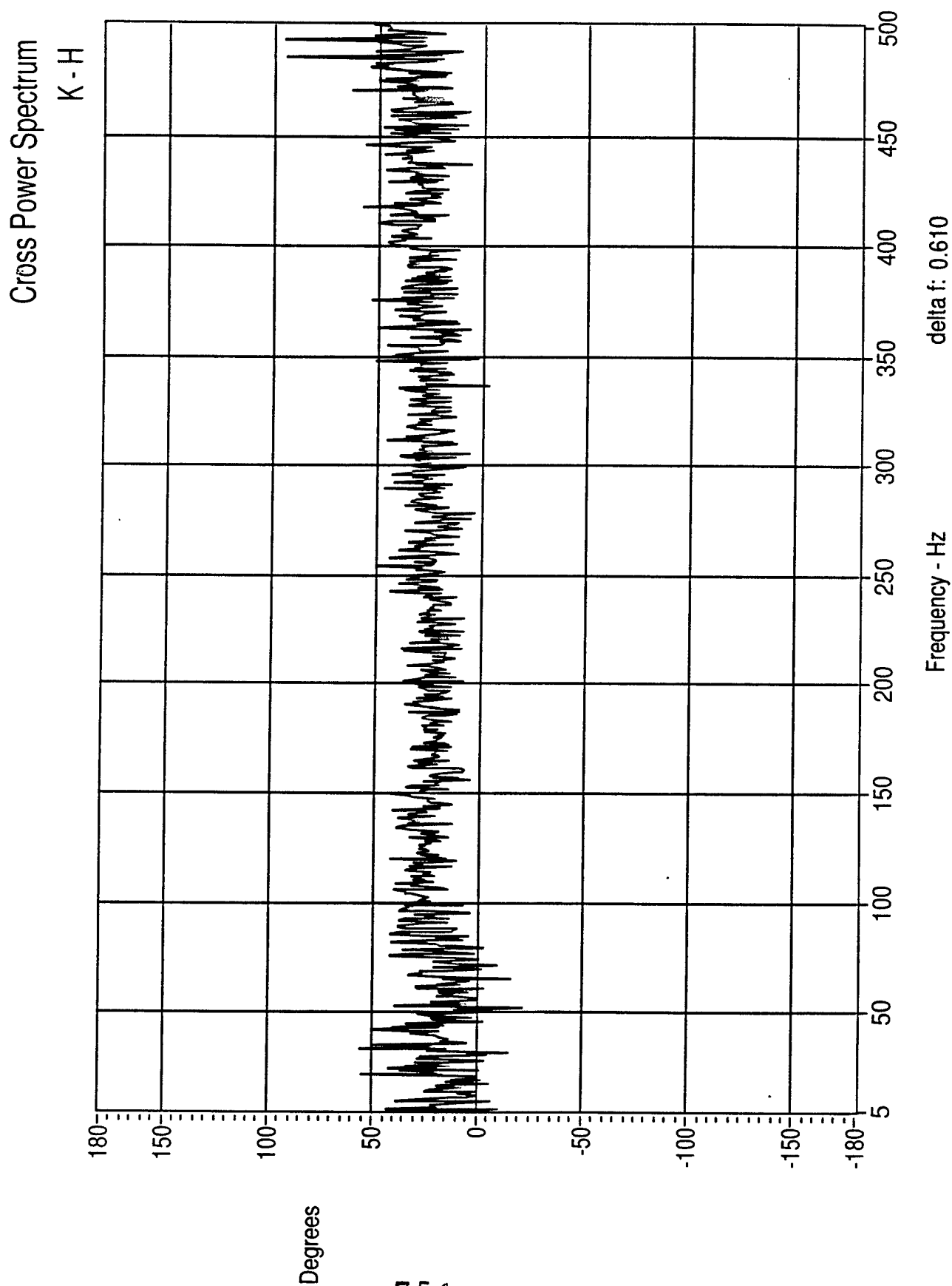
F-15 TPN\_2870: alpha=20 beta=-4 bp=0



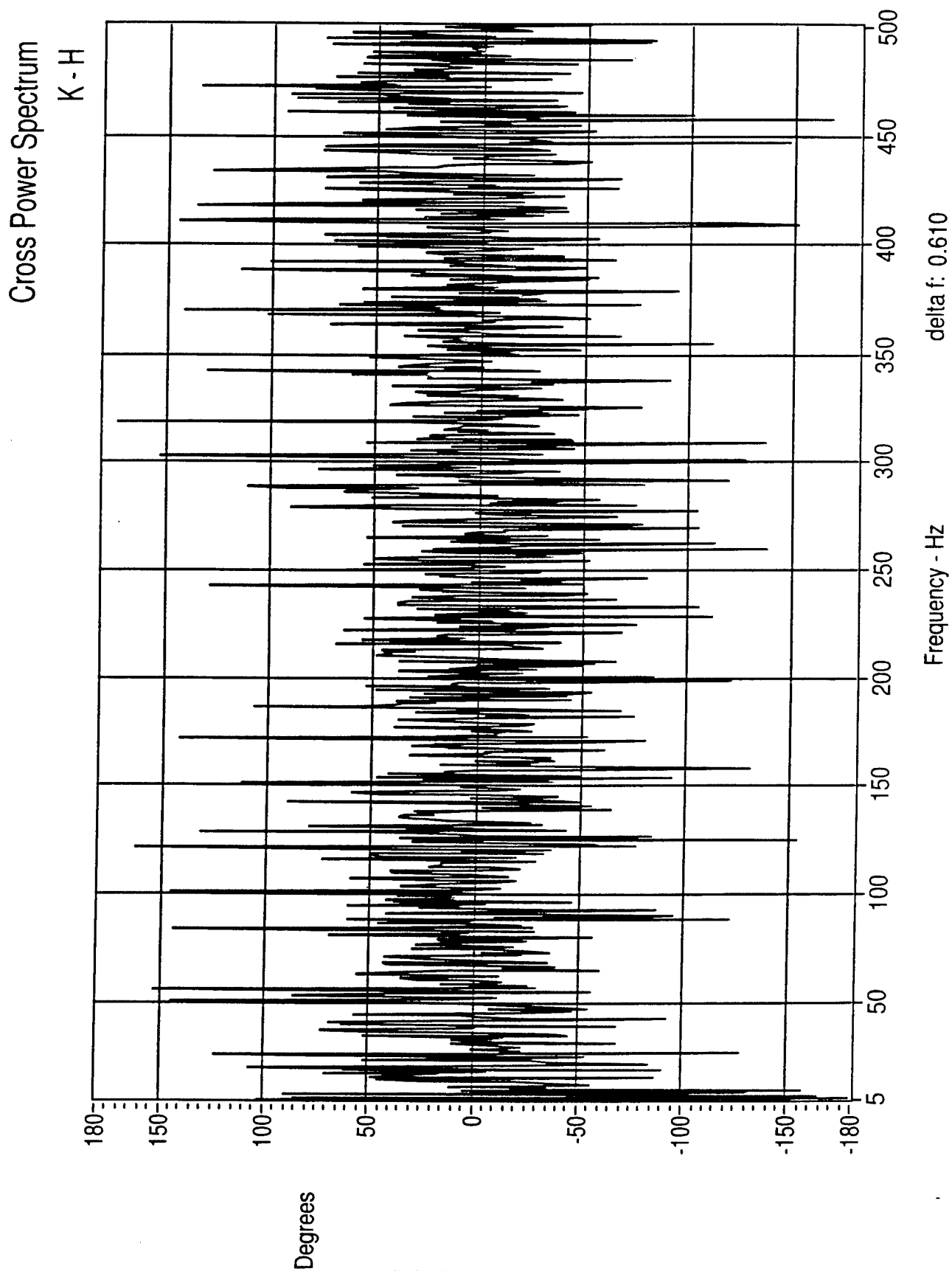
F-15 TPN\_2872: alpha=24 beta=-4 bp=0



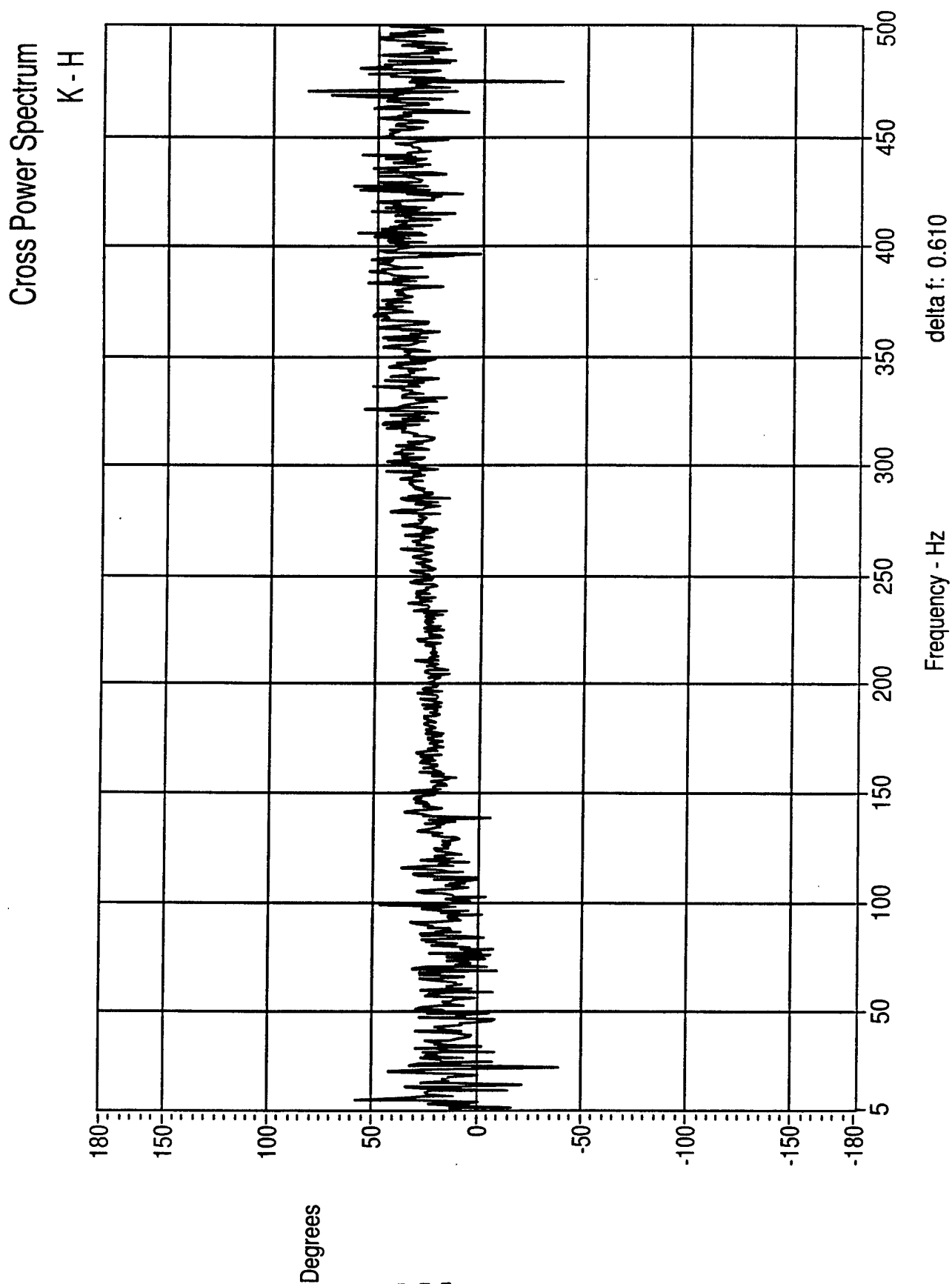
F-15 TPN\_2874:  $\alpha=32$   $\beta=-4$   $\beta=0$



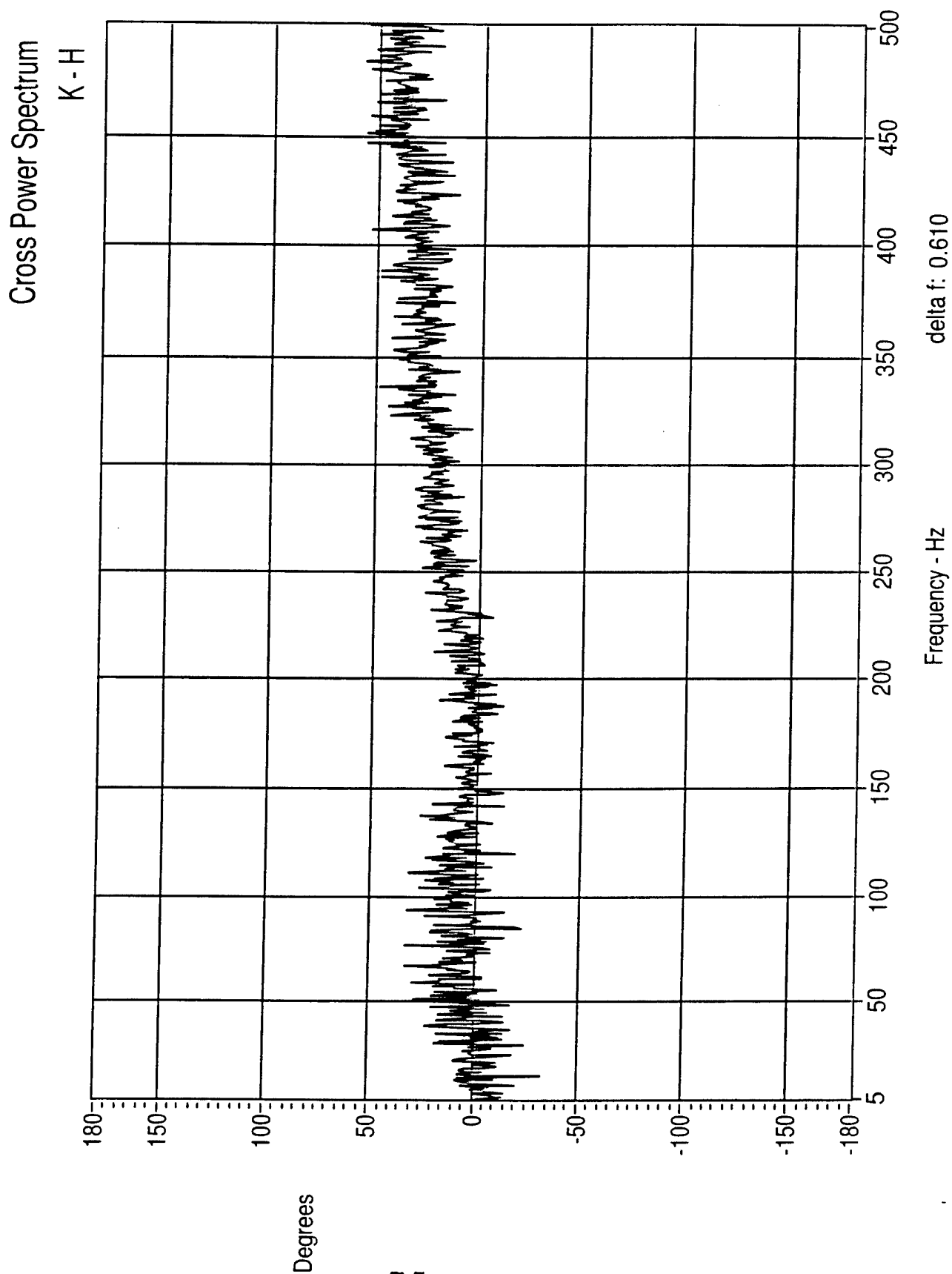
F-15 TPN\_3351: alpha=8 beta=4 bp=45



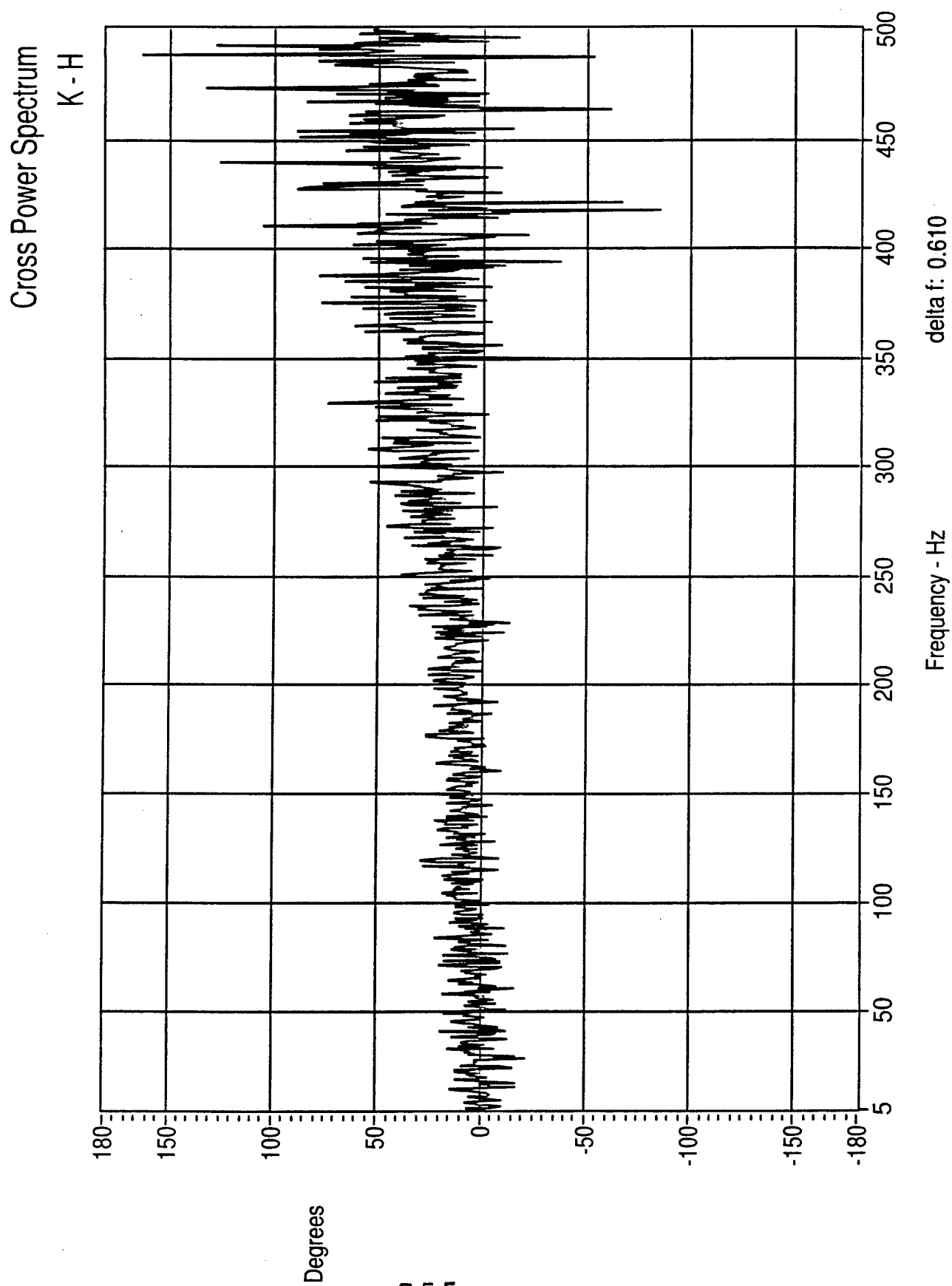
F-15 TPN\_3357: alpha=20 beta=4 bp=45



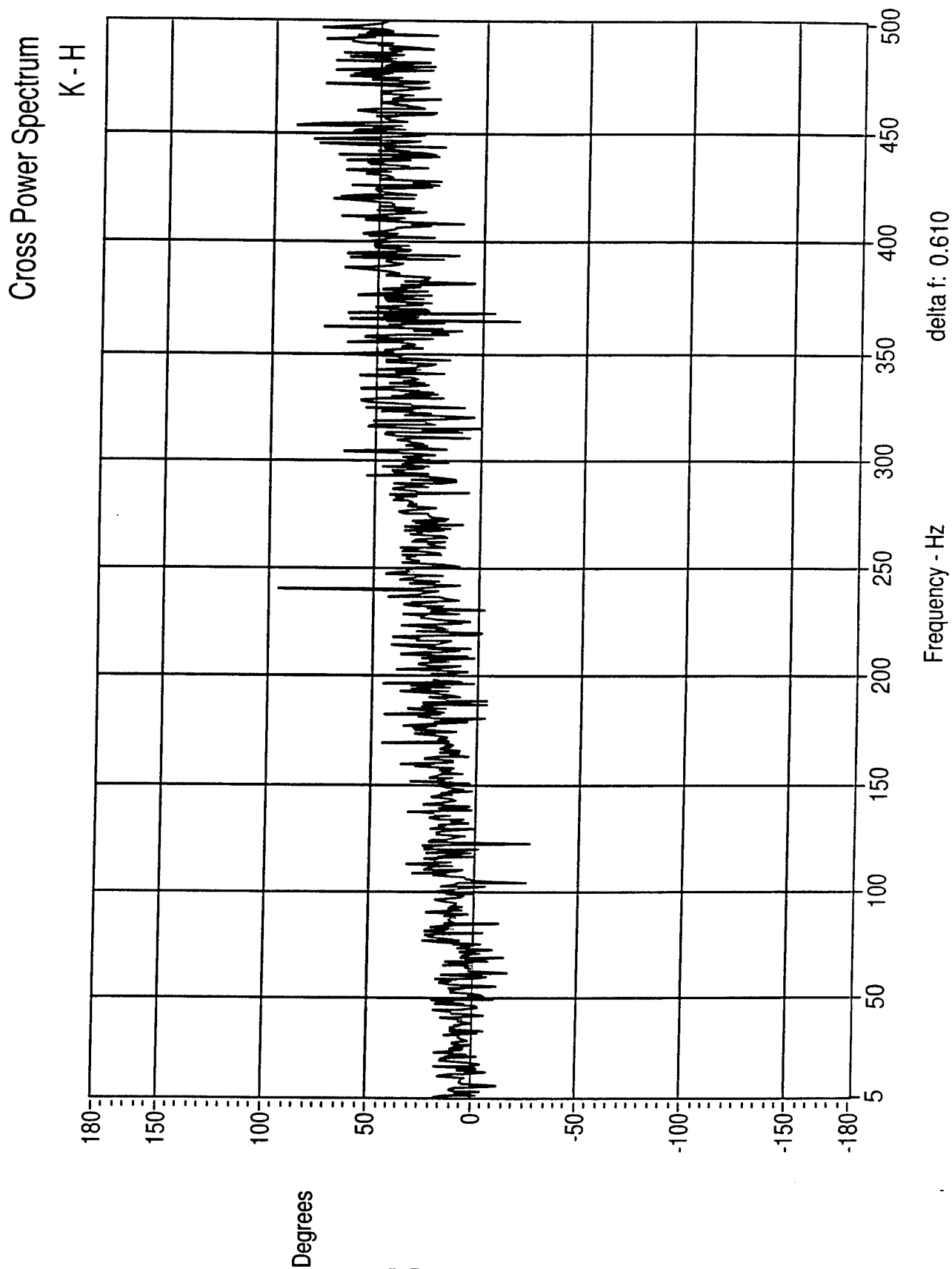
F-15 TPN\_3359: alpha=24 beta=4 bp=45



F-15 TPN\_3361: alpha=32 beta=4 bp=45

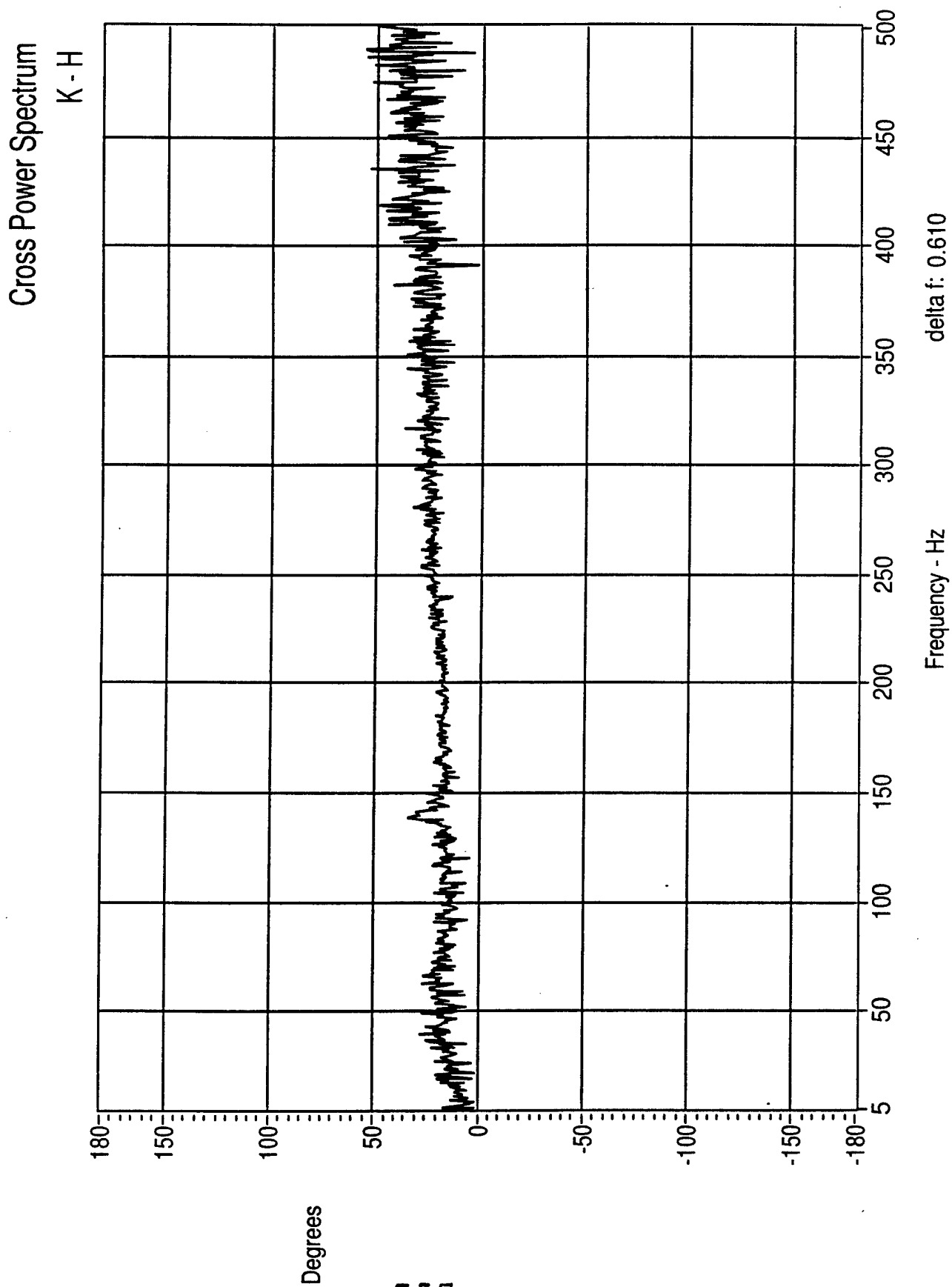


F-15 TPN\_3333: alpha=8 beta=0 bp=45





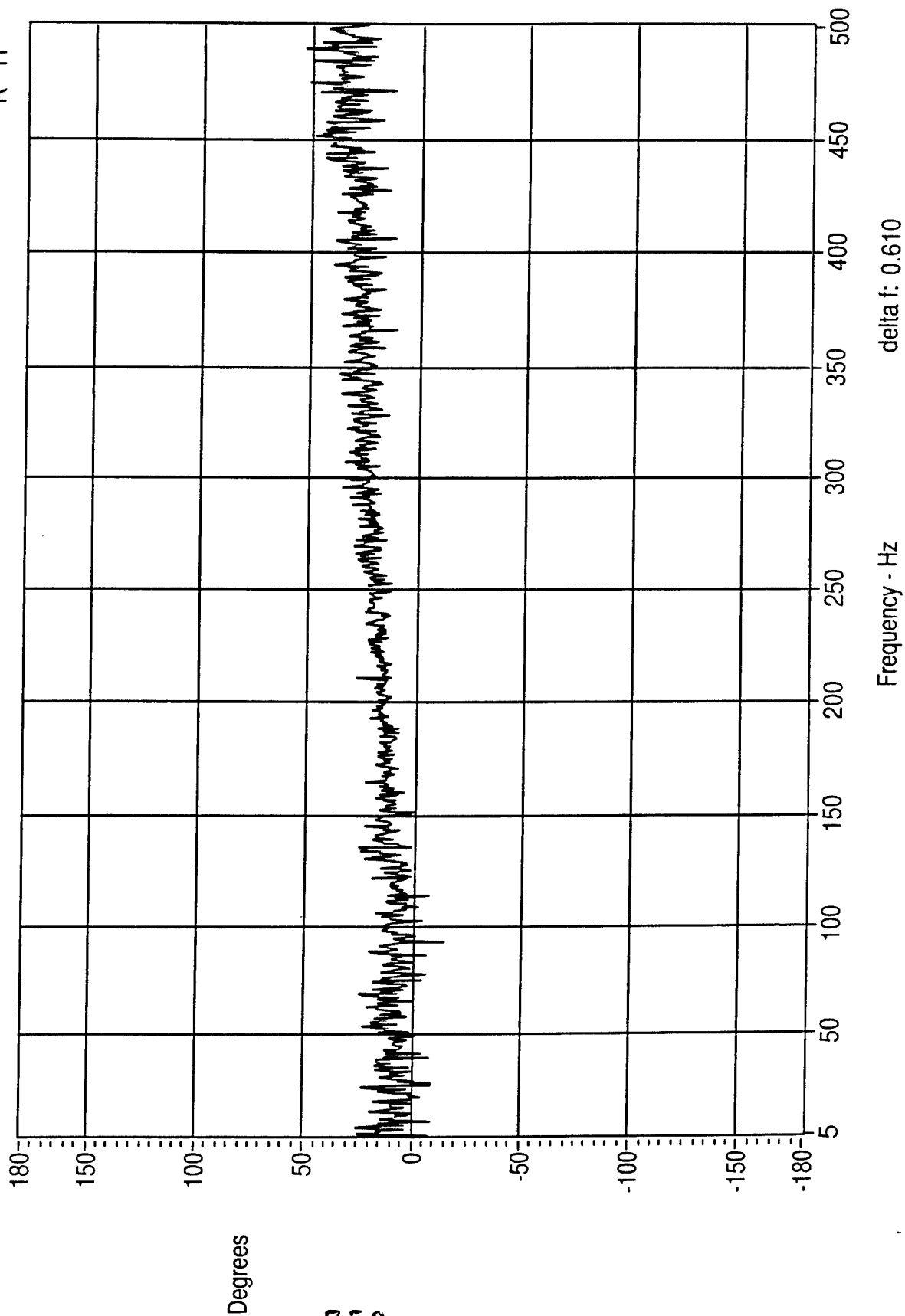
F-15 TPN\_3339: alpha=20 beta=0 bp=45



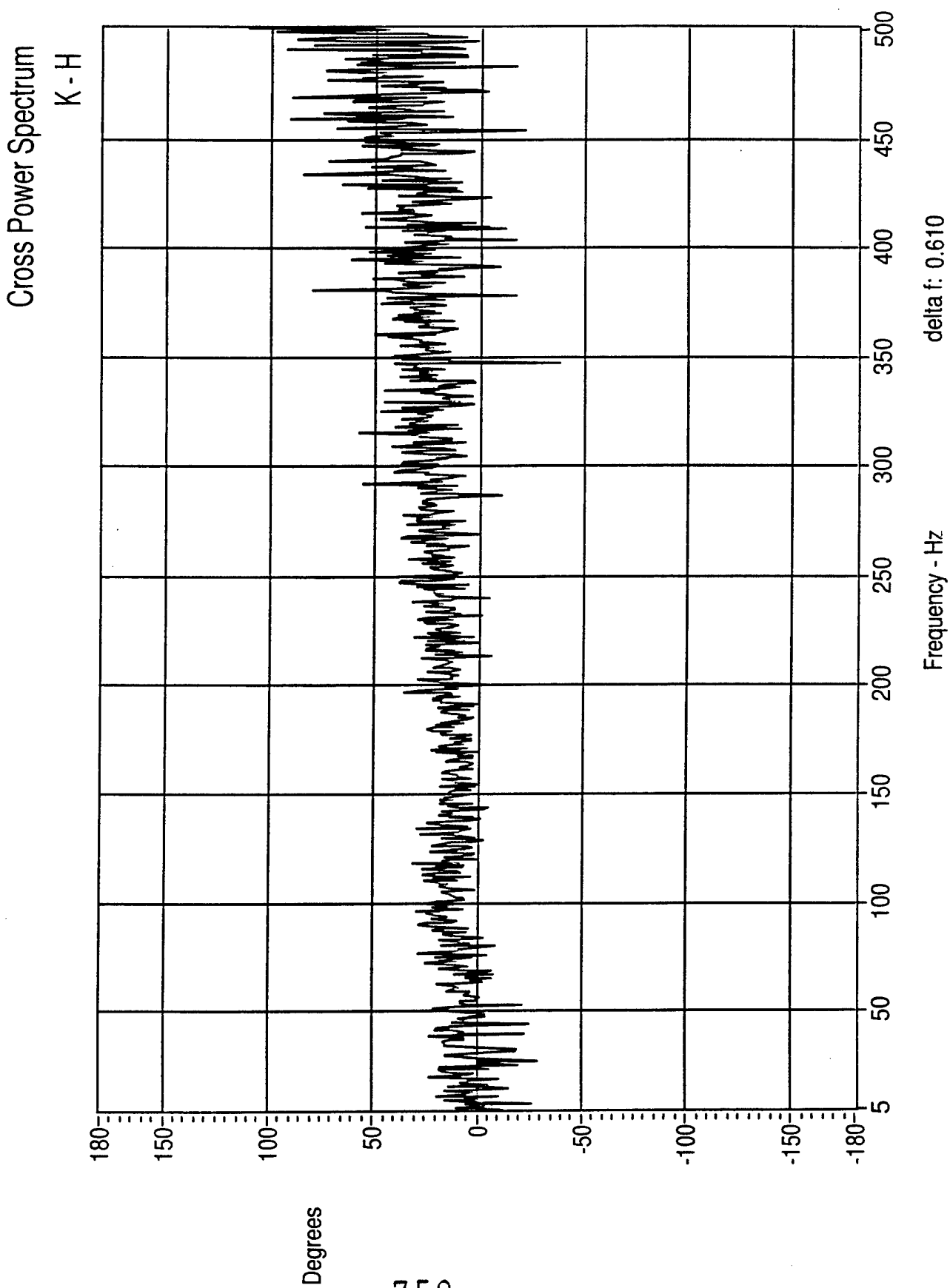
F-15 TPN\_3341: alpha=24 beta=0 bp=45

Cross Power Spectrum

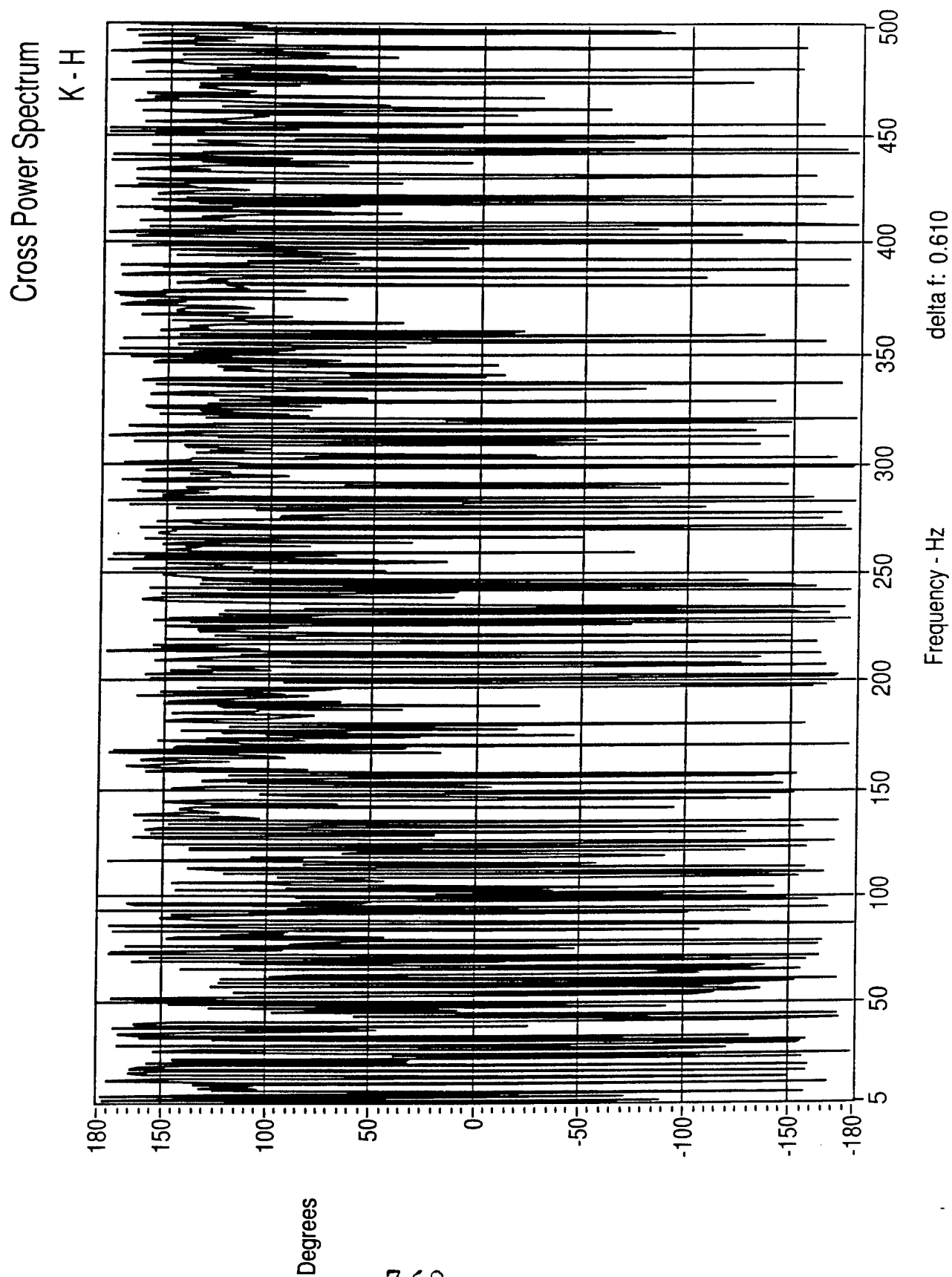
K - H



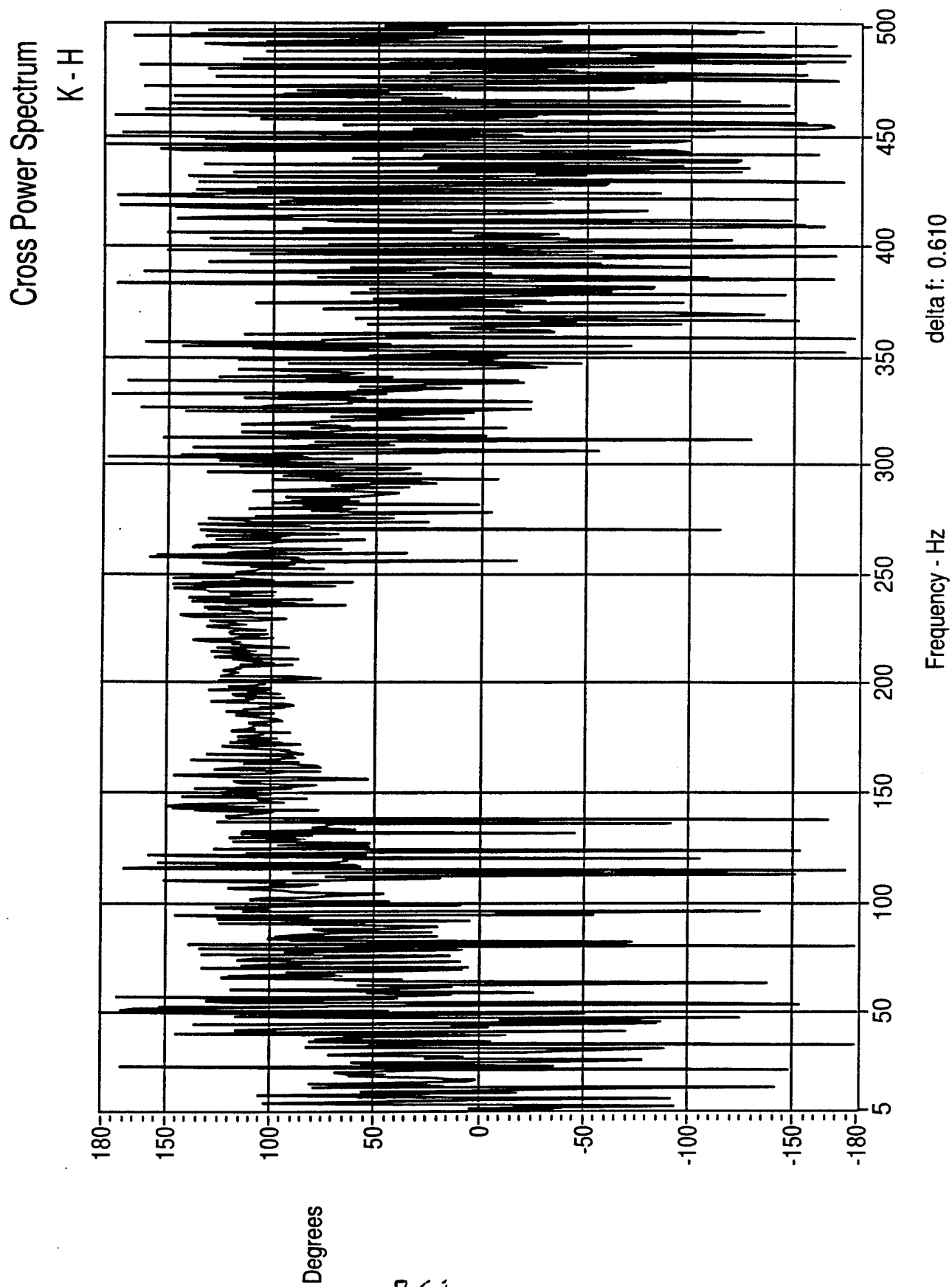
F-15 TPN\_3343: alpha=32 beta=0 bp=45



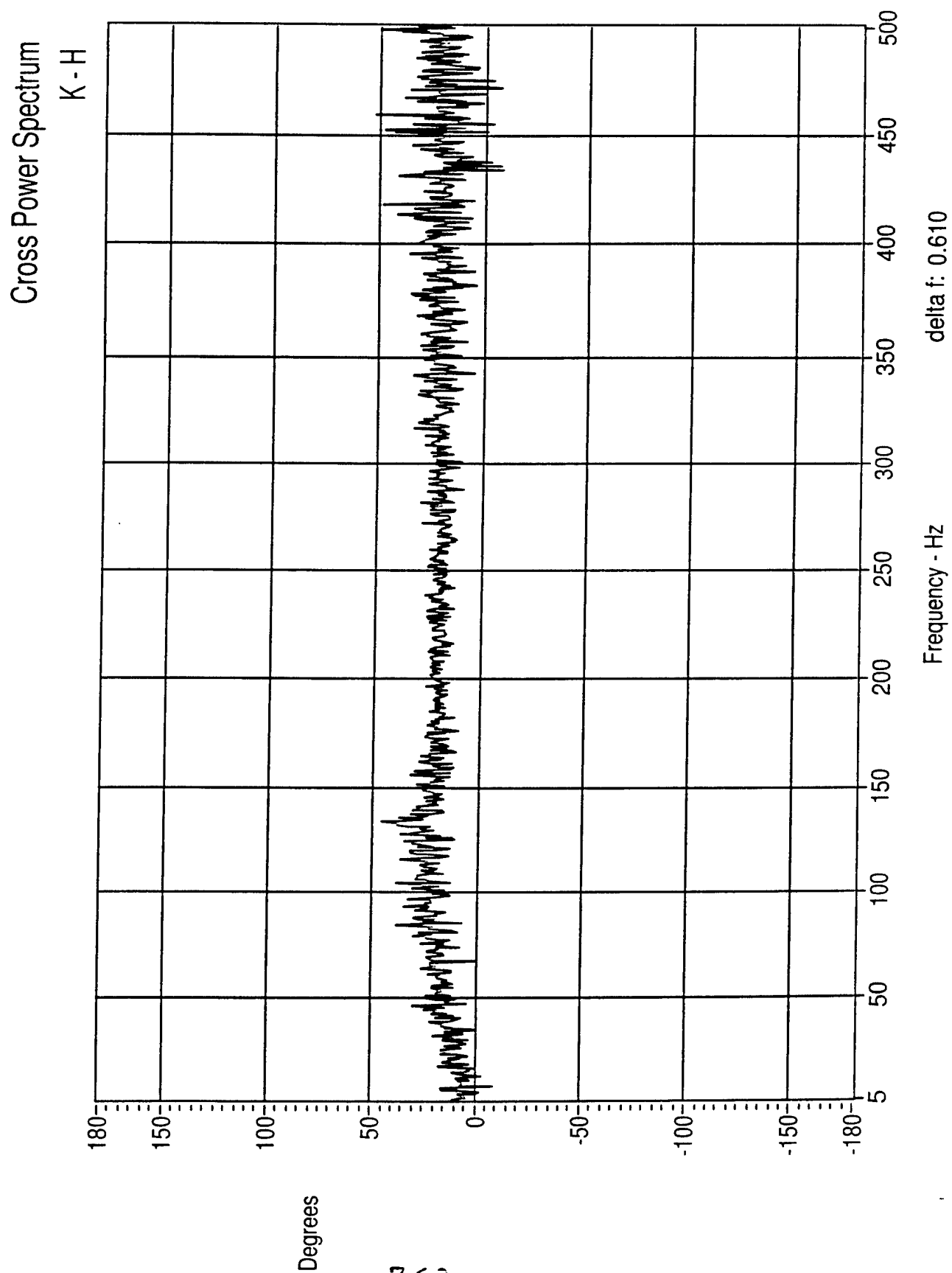
F-15 TPN\_3369: alpha=8 beta=-4 bp=45



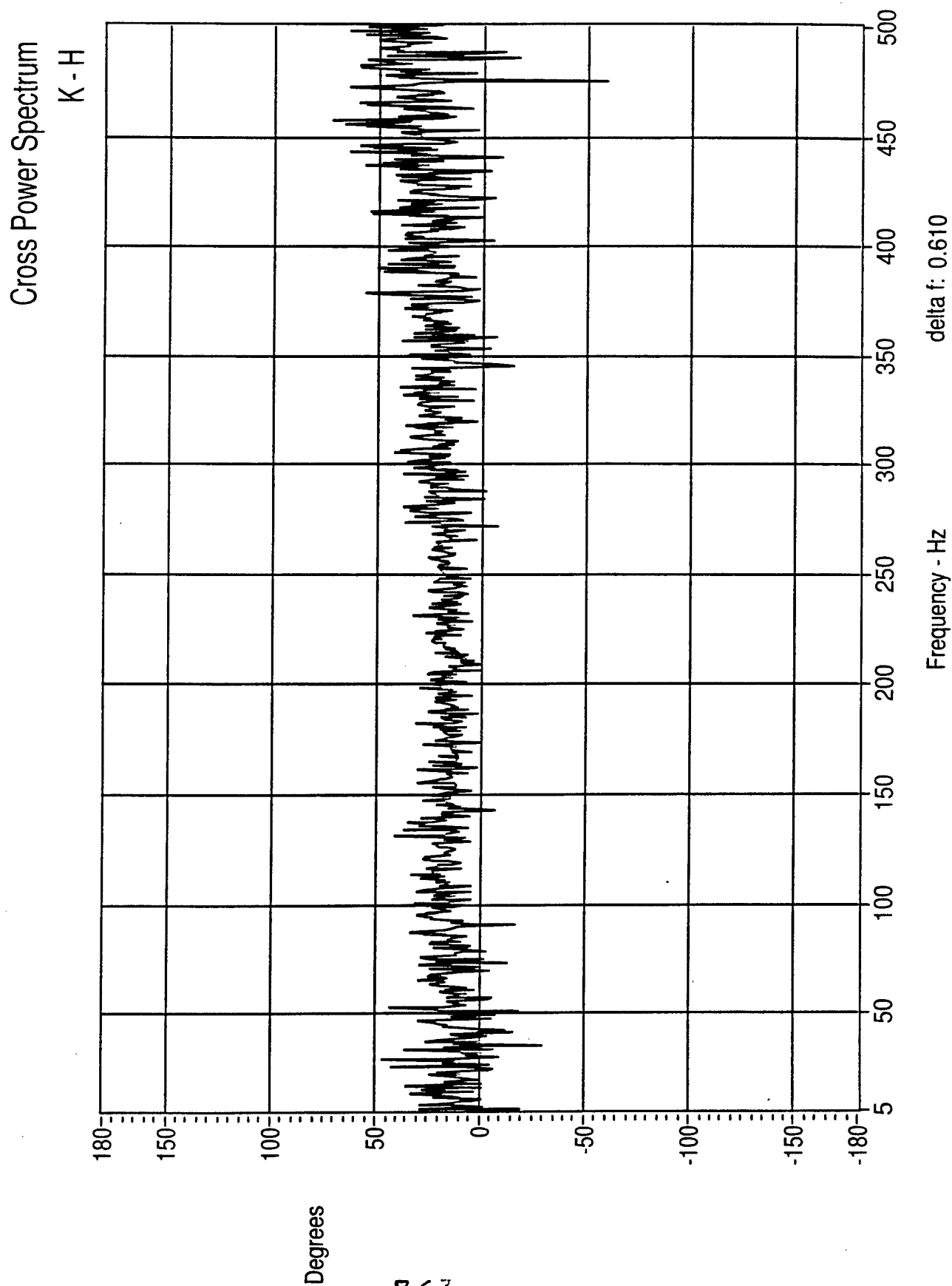
F-15 TPN\_3375: alpha=20 beta=-4 bp=45



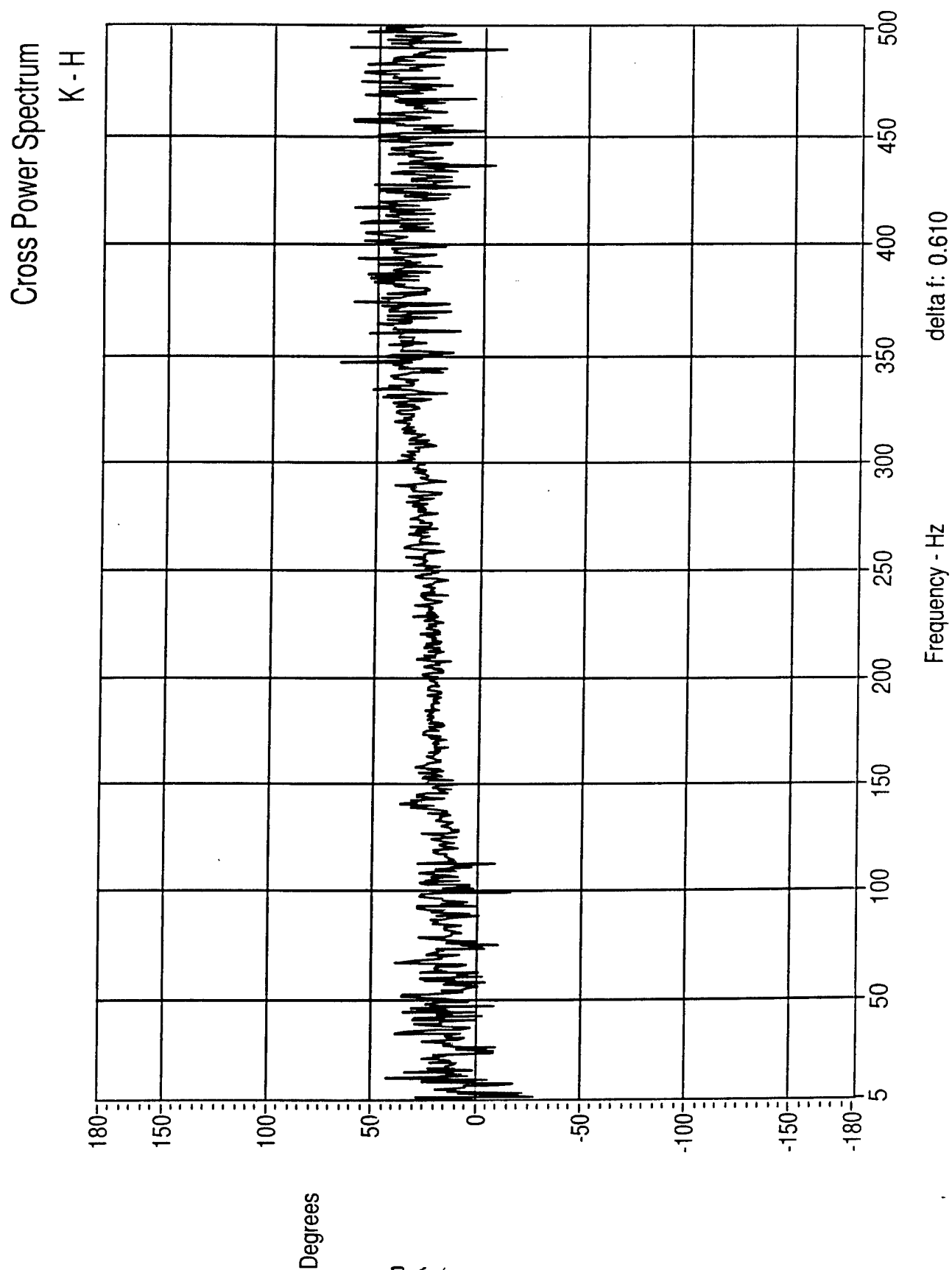
F-15 TPN\_3377: alpha=24 beta=-4 bp=45



F-15 TPN\_3379: alpha=32 beta=-4 bp=45

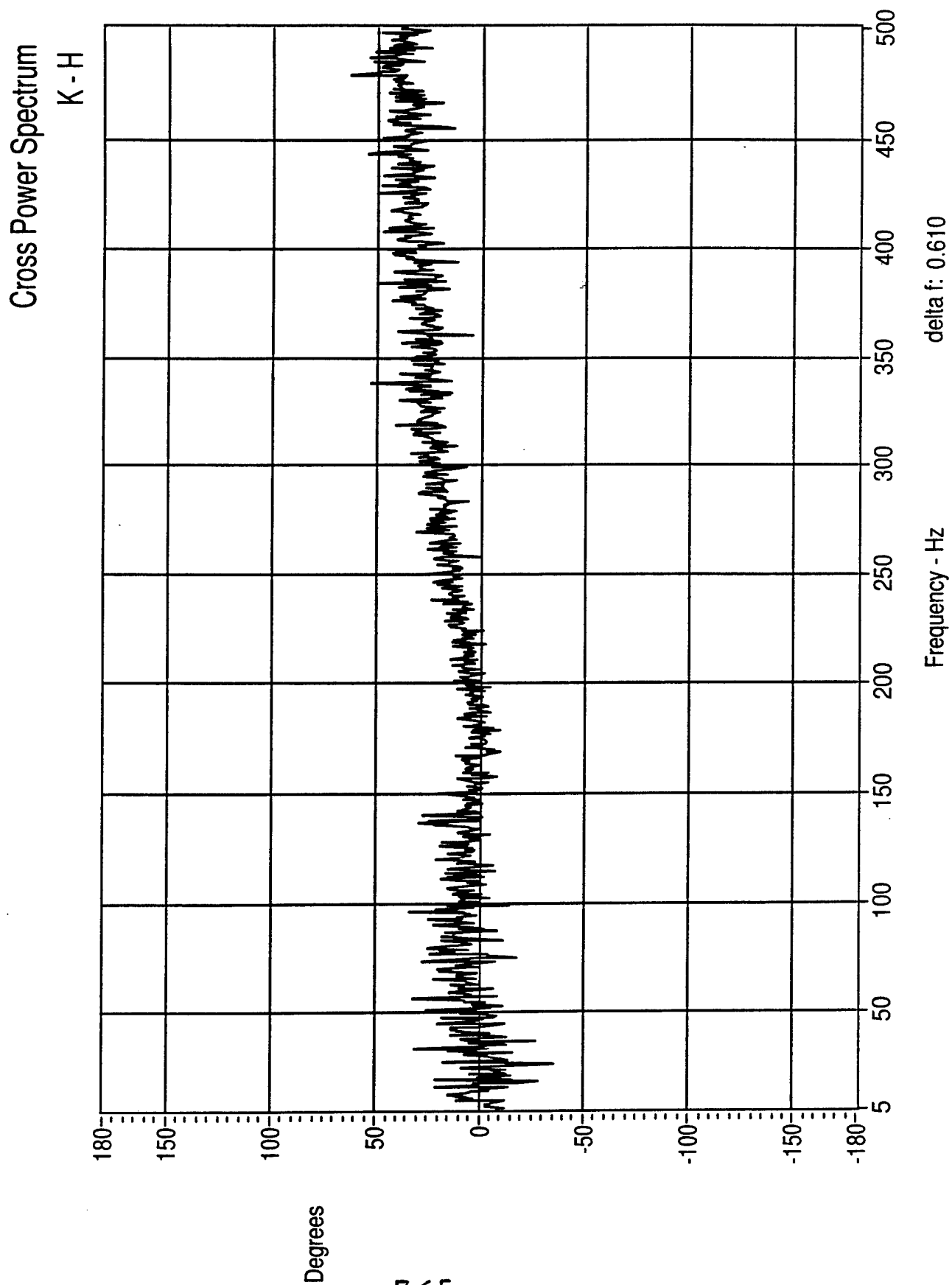


F-15 TPN\_3046: alpha=20 beta=4 bp=65





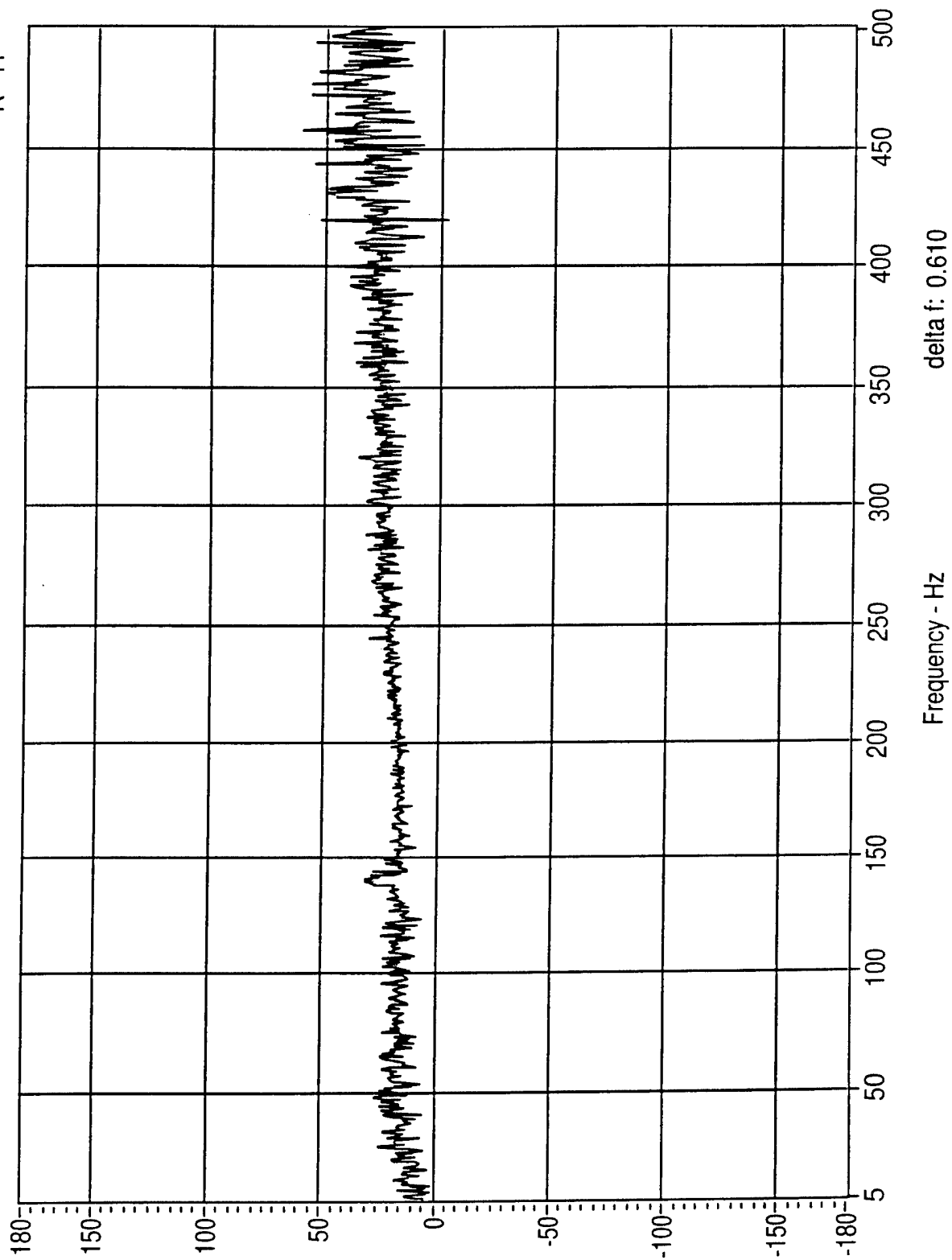
F-15 TPN\_3048: alpha=24 beta=4 bp=65



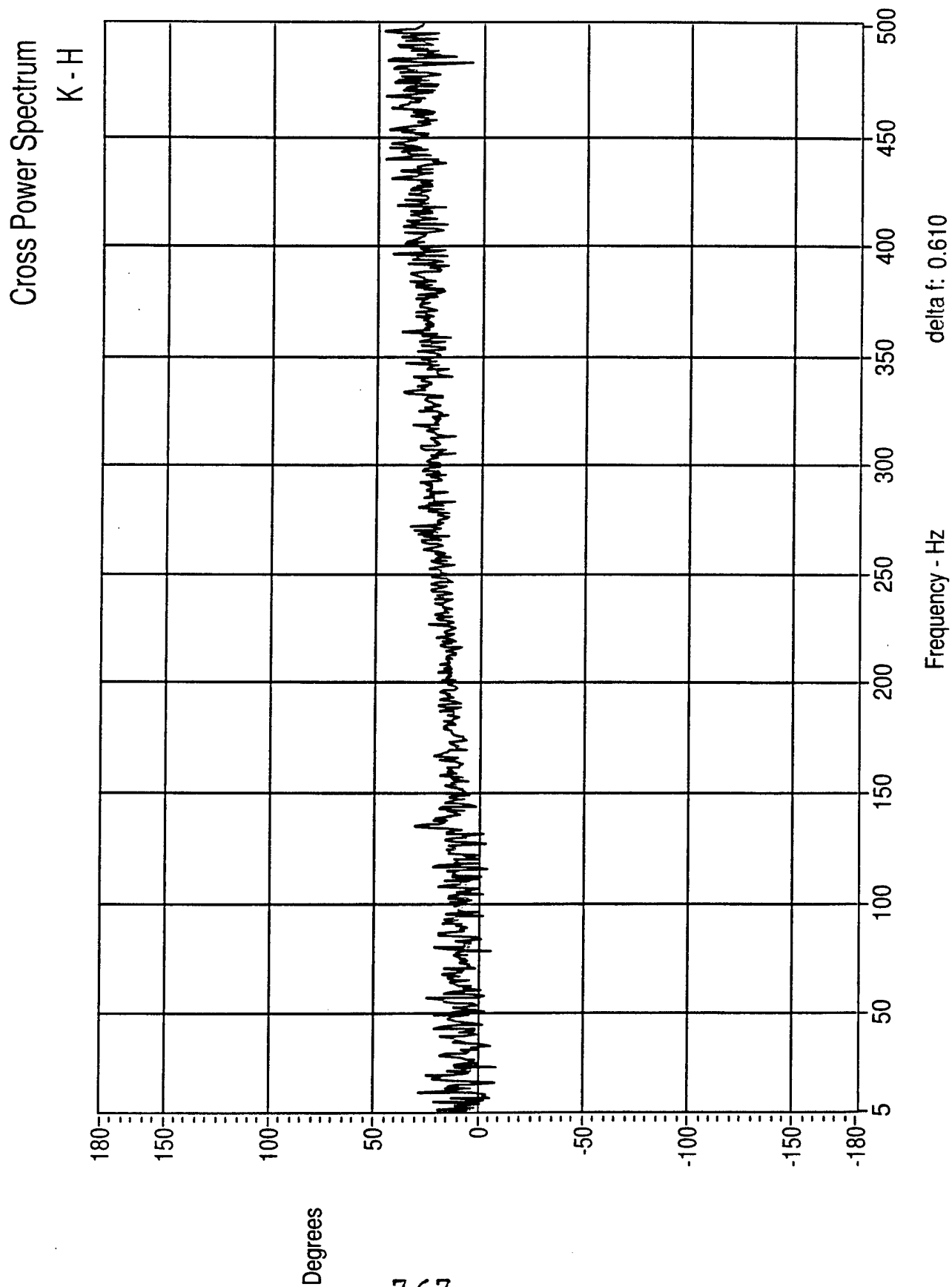
F-15 TPN\_3040: alpha=20 beta=0 bp=65

# Cross Power Spectrum

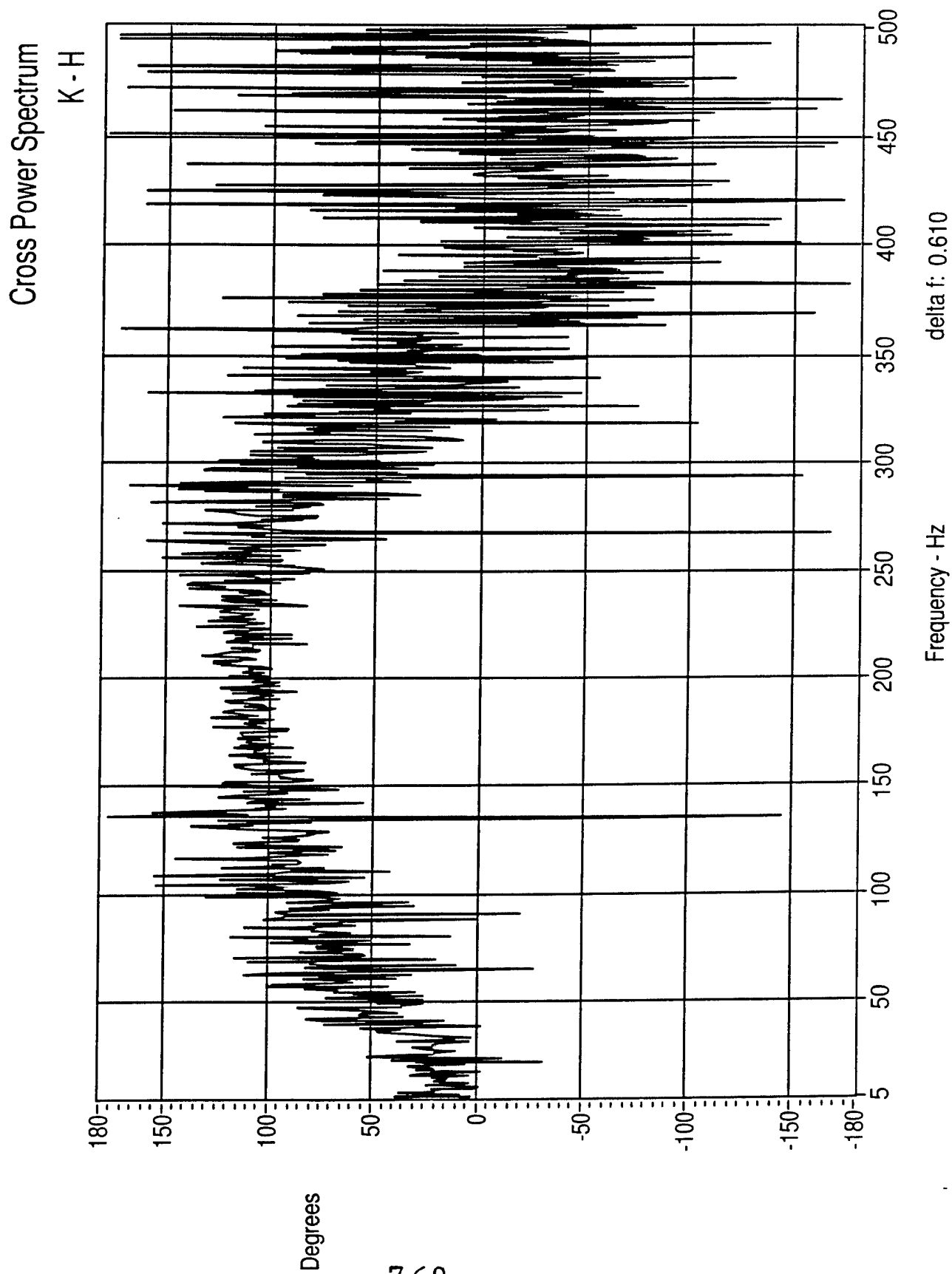
K - H



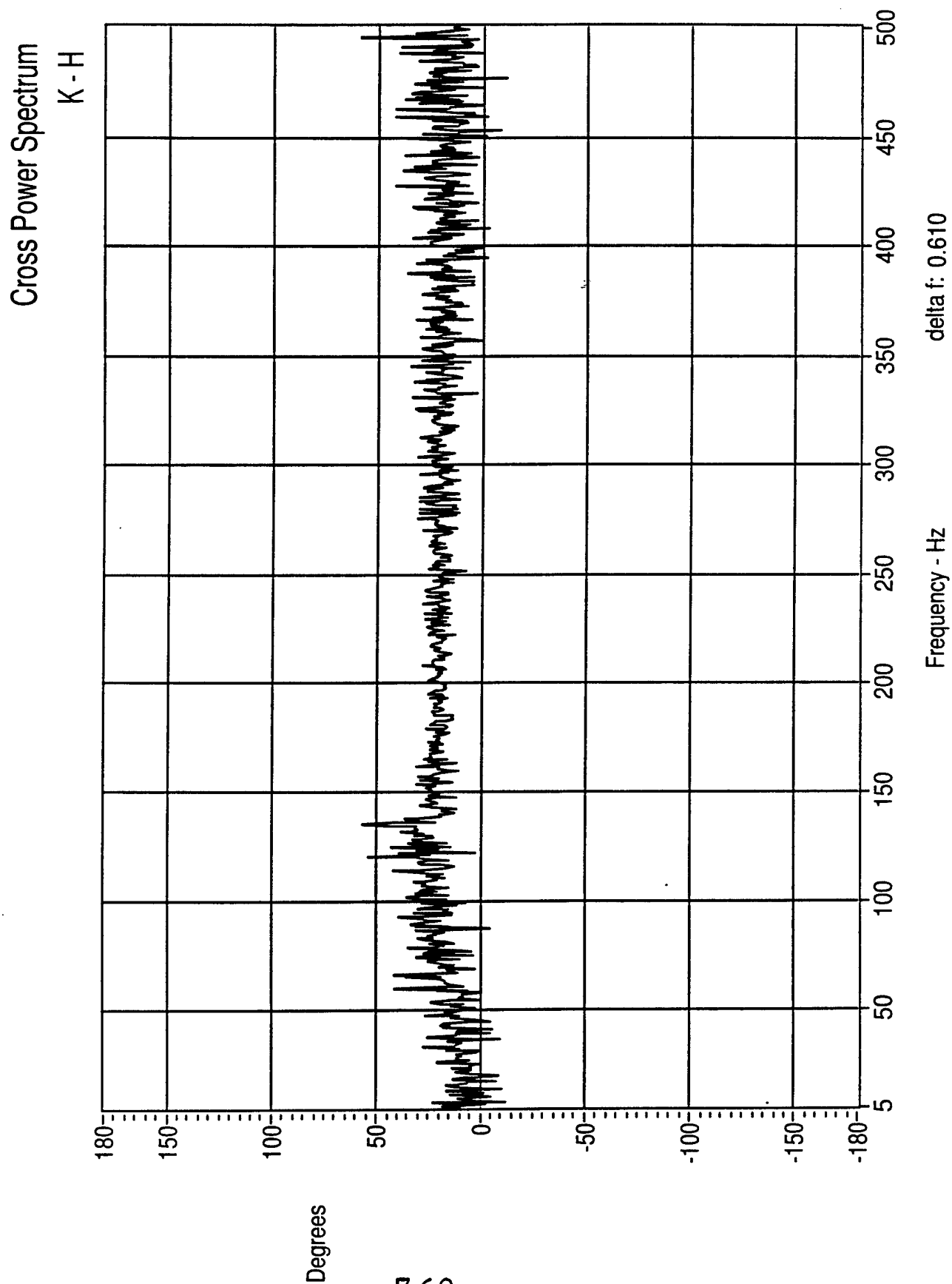
F-15 TPN\_3042: alpha=24 beta=0 bp=65



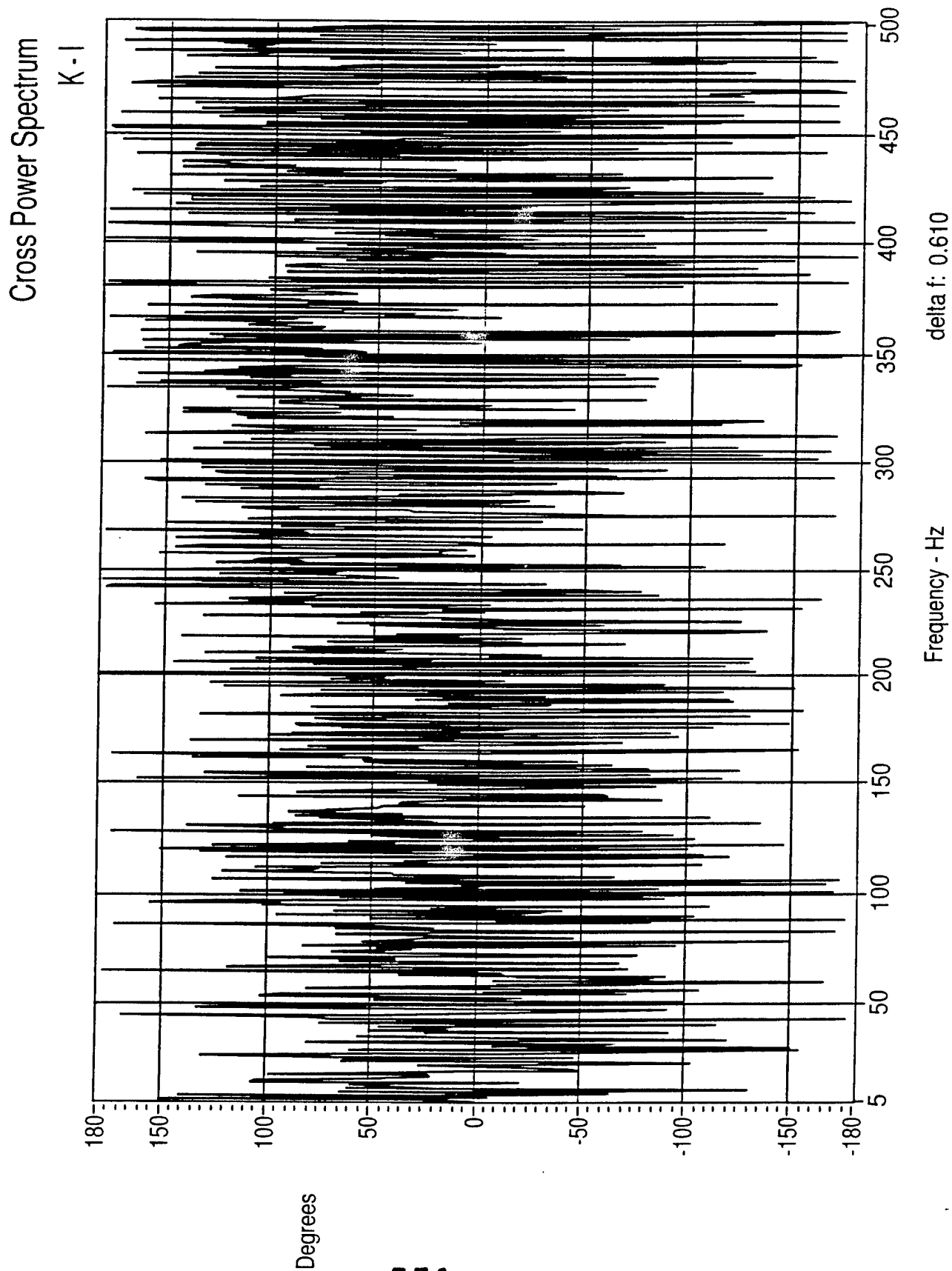
F-15 TPN\_3034: alpha=20 beta=-4 bp=65



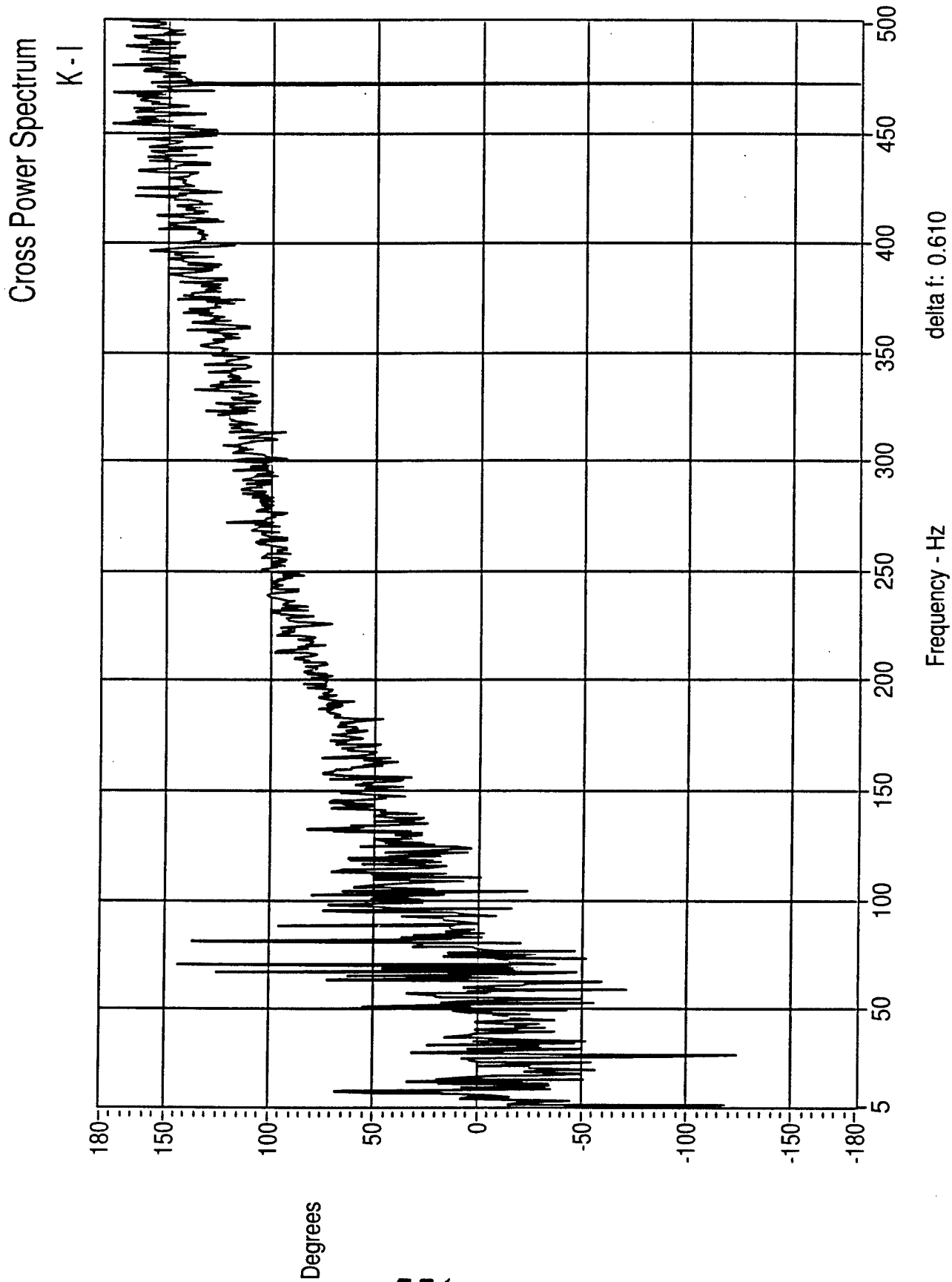
F-15 TPN\_3036: alpha=24 beta=-4 bp=65



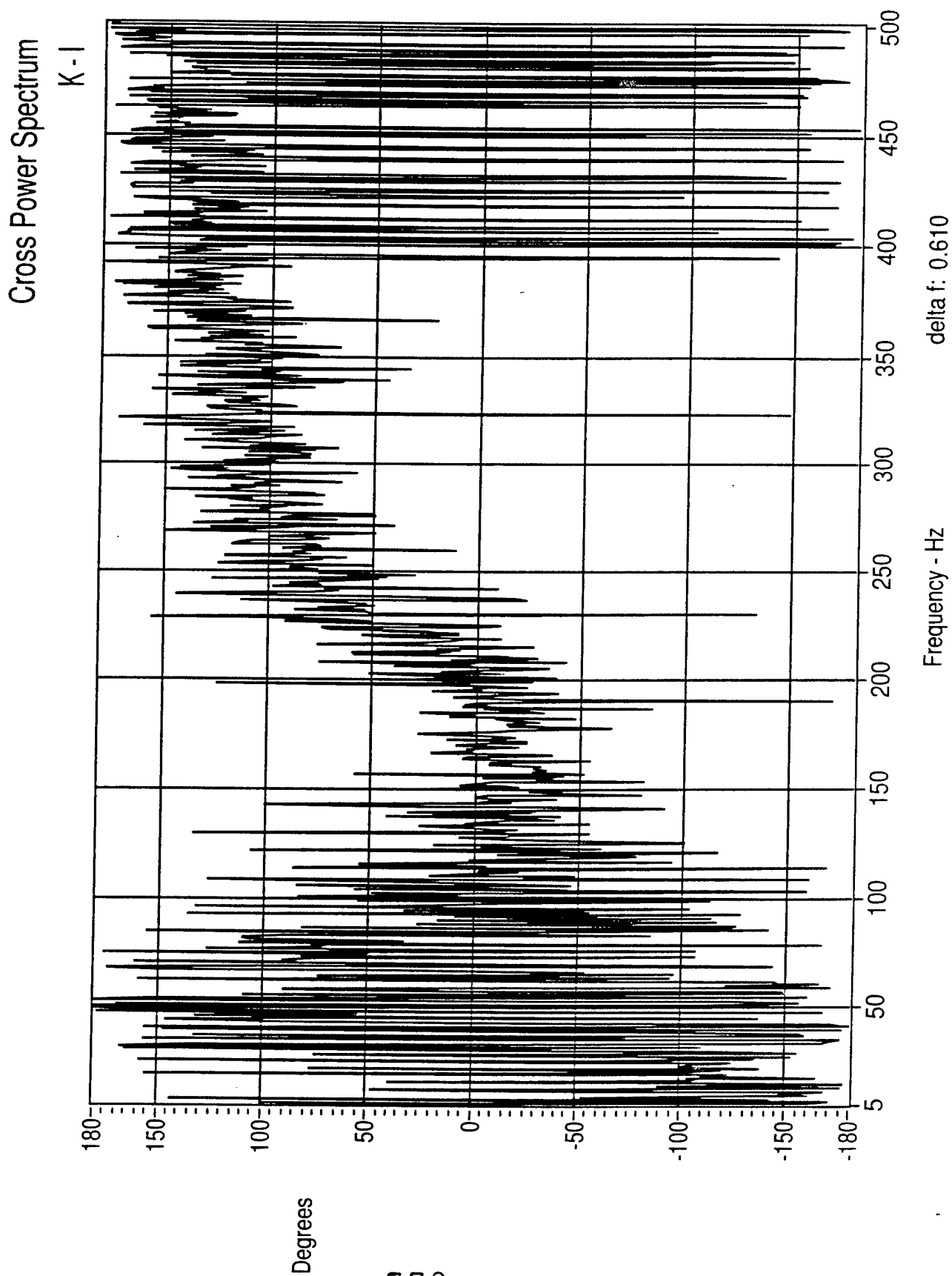
F-15 TPN\_2918: alpha=8 beta=4 bp=0



F-15 TPN\_2924: alpha=20 beta=4 bp=0

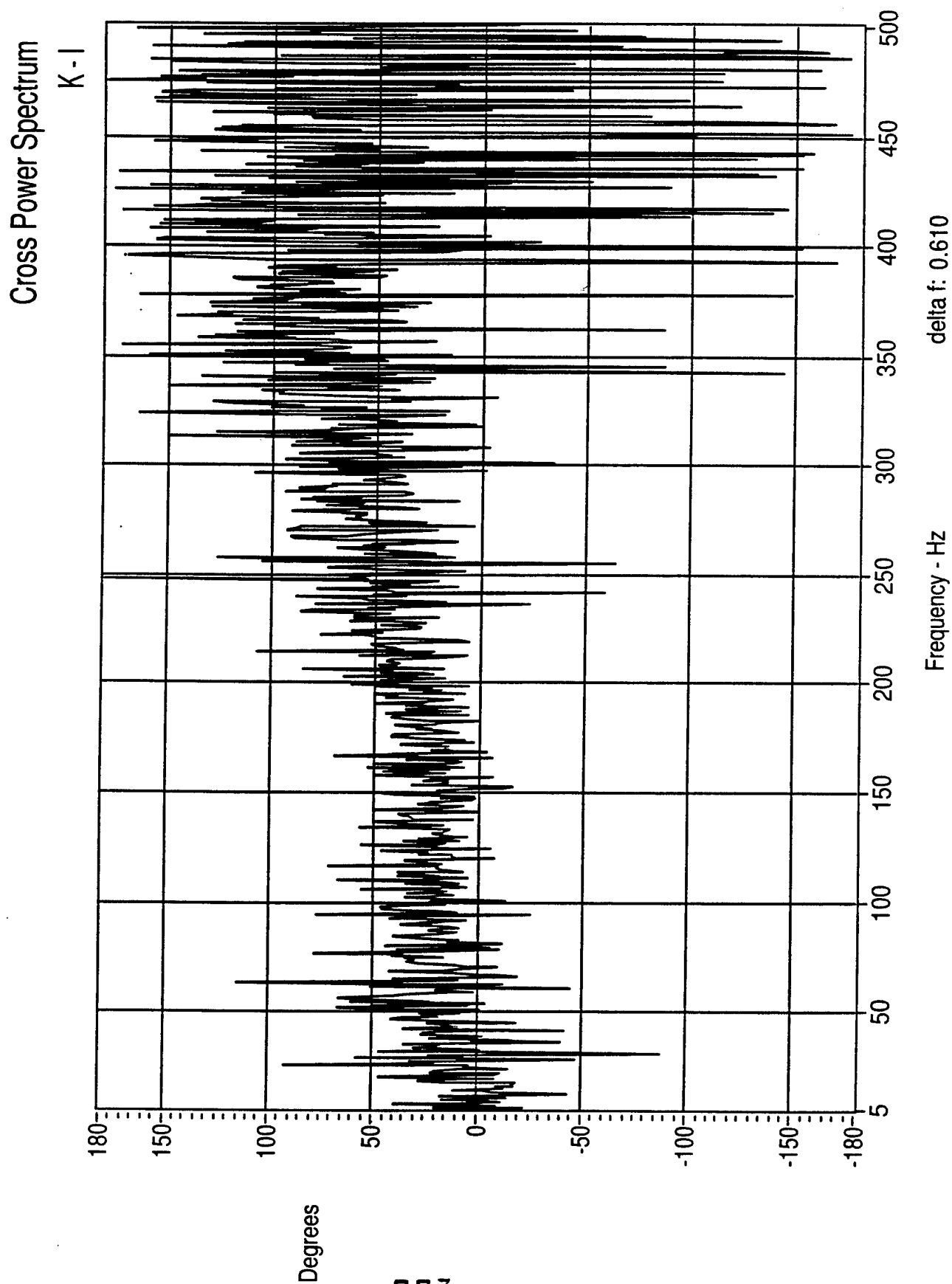


F-15 TPN\_2926: alpha=24 beta=4 bp=0

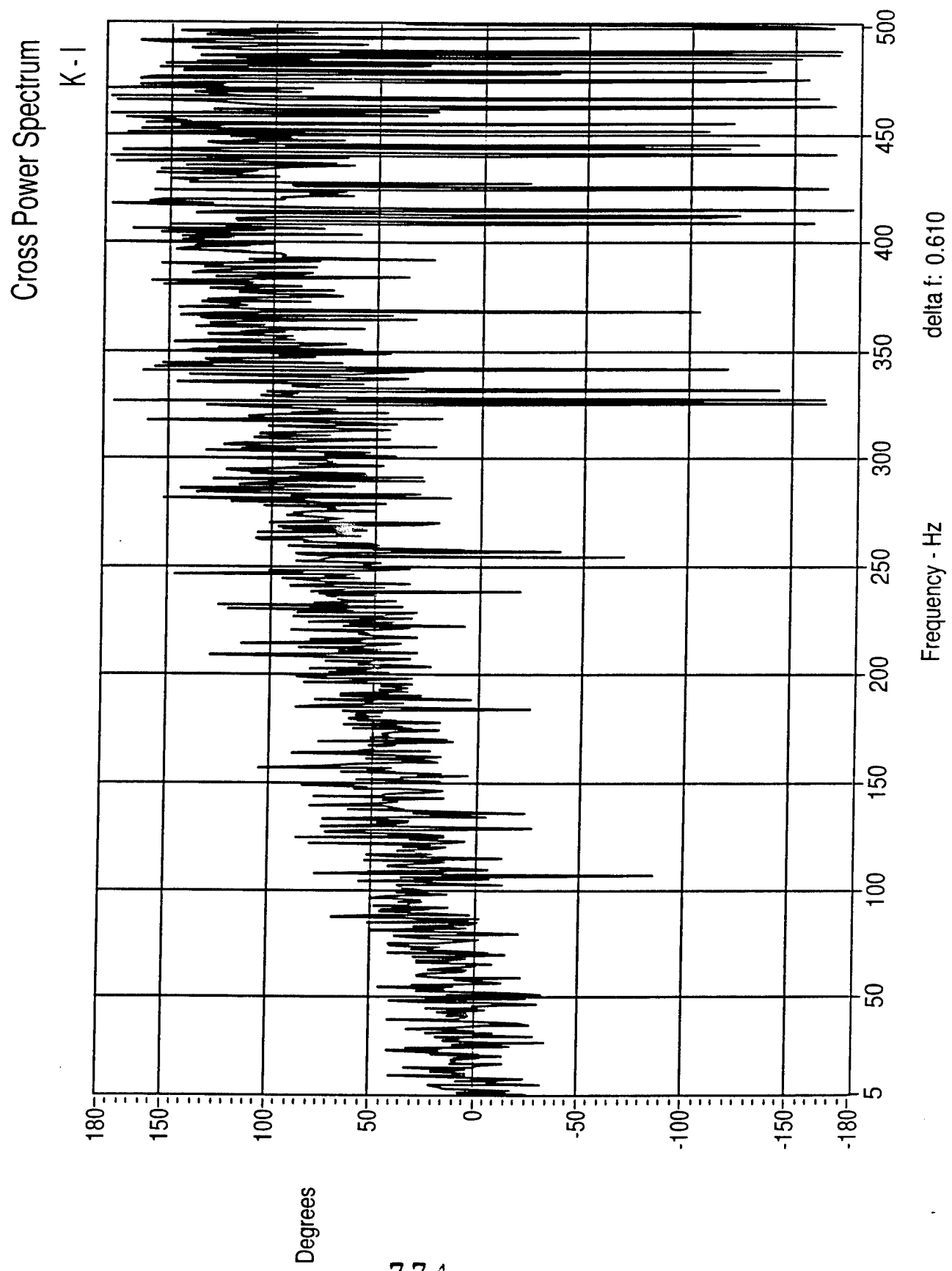




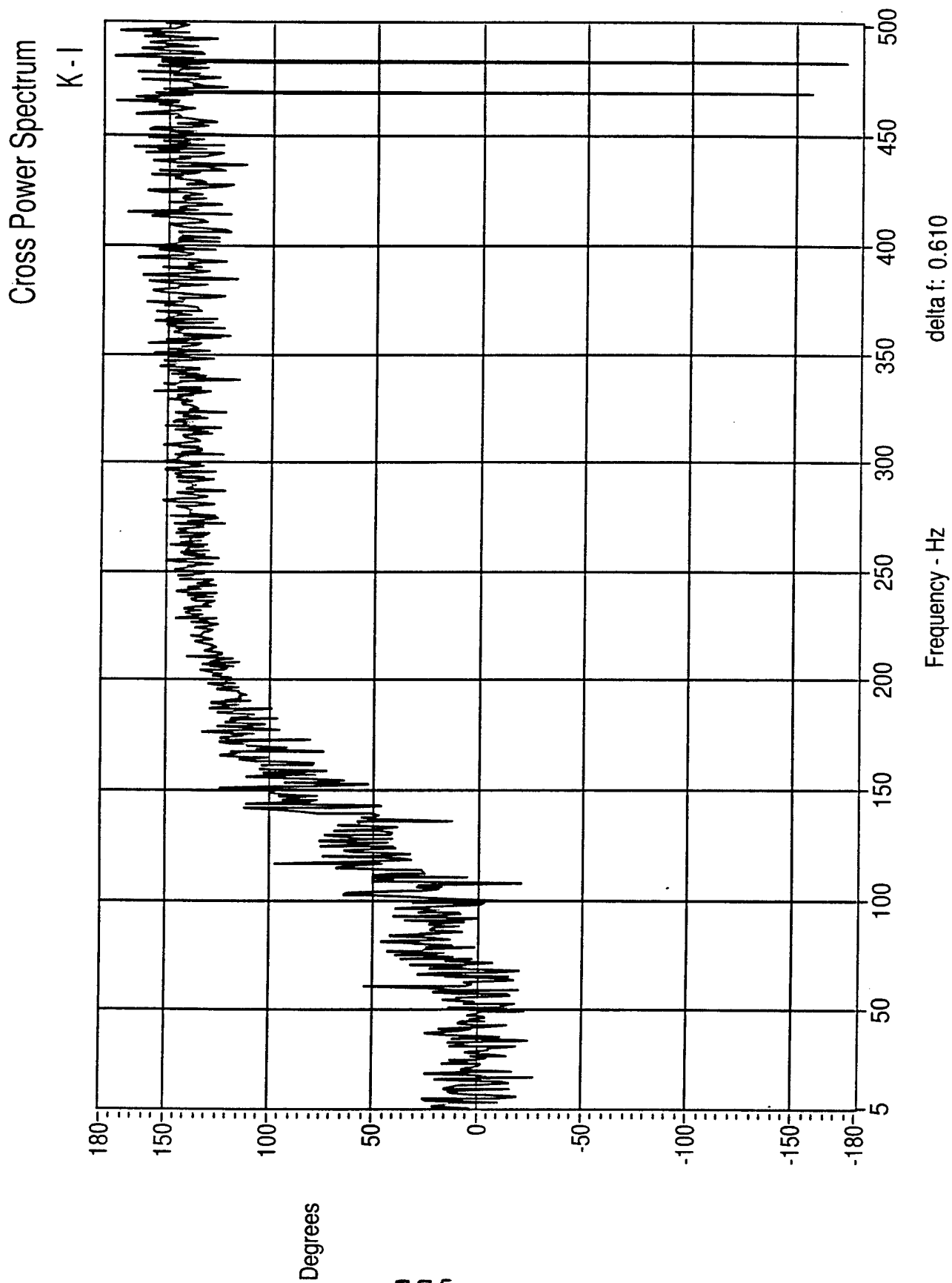
F-15 TPN\_2928: alpha=32 beta=4 bp=0



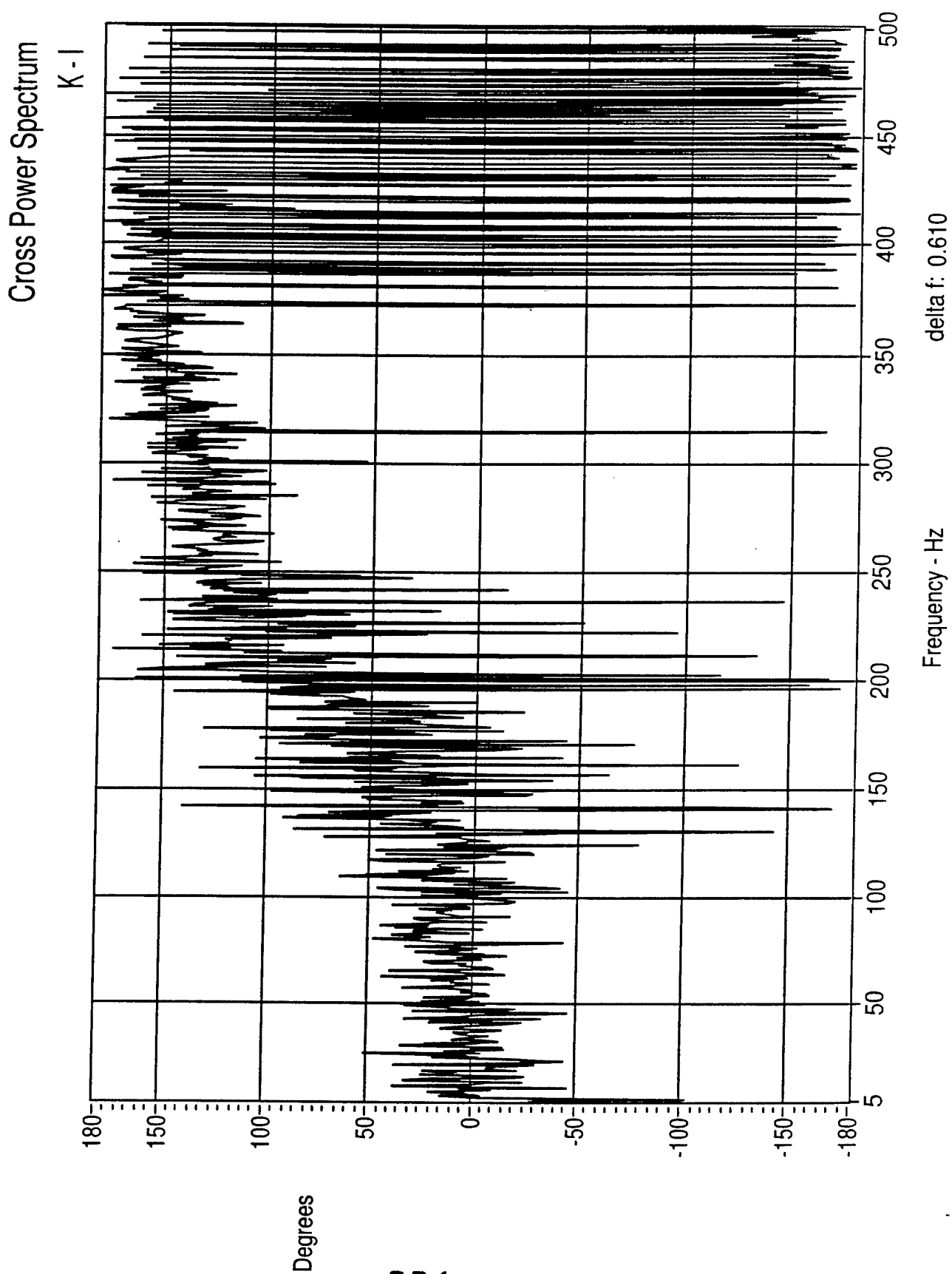
F-15 TPN\_2844: alpha=8 beta=0 bp=0



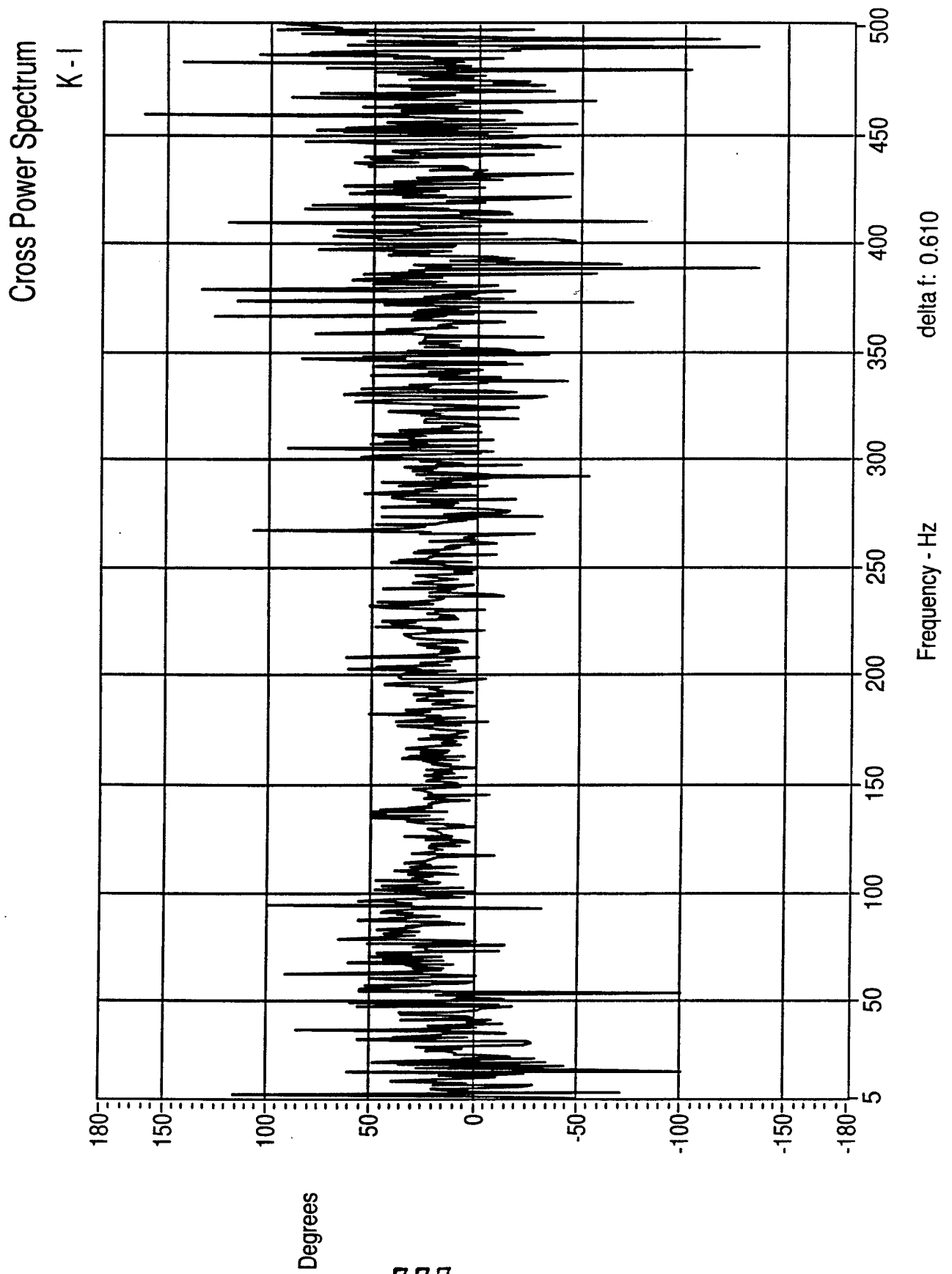
F-15 TPN\_2850: alpha=20 beta=0 bp=0



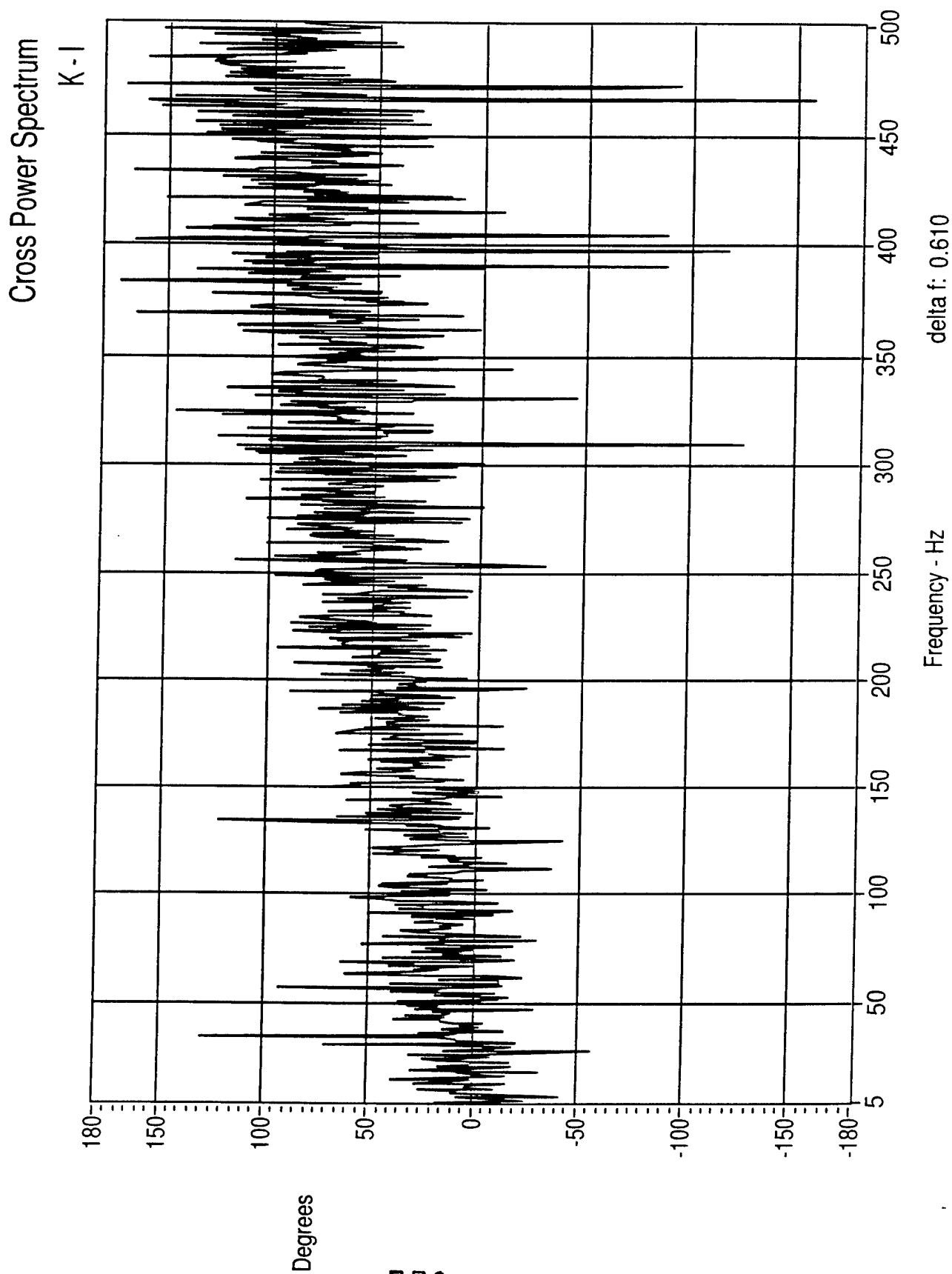
F-15 TPN\_2852: alpha=24 beta=0 bp=0



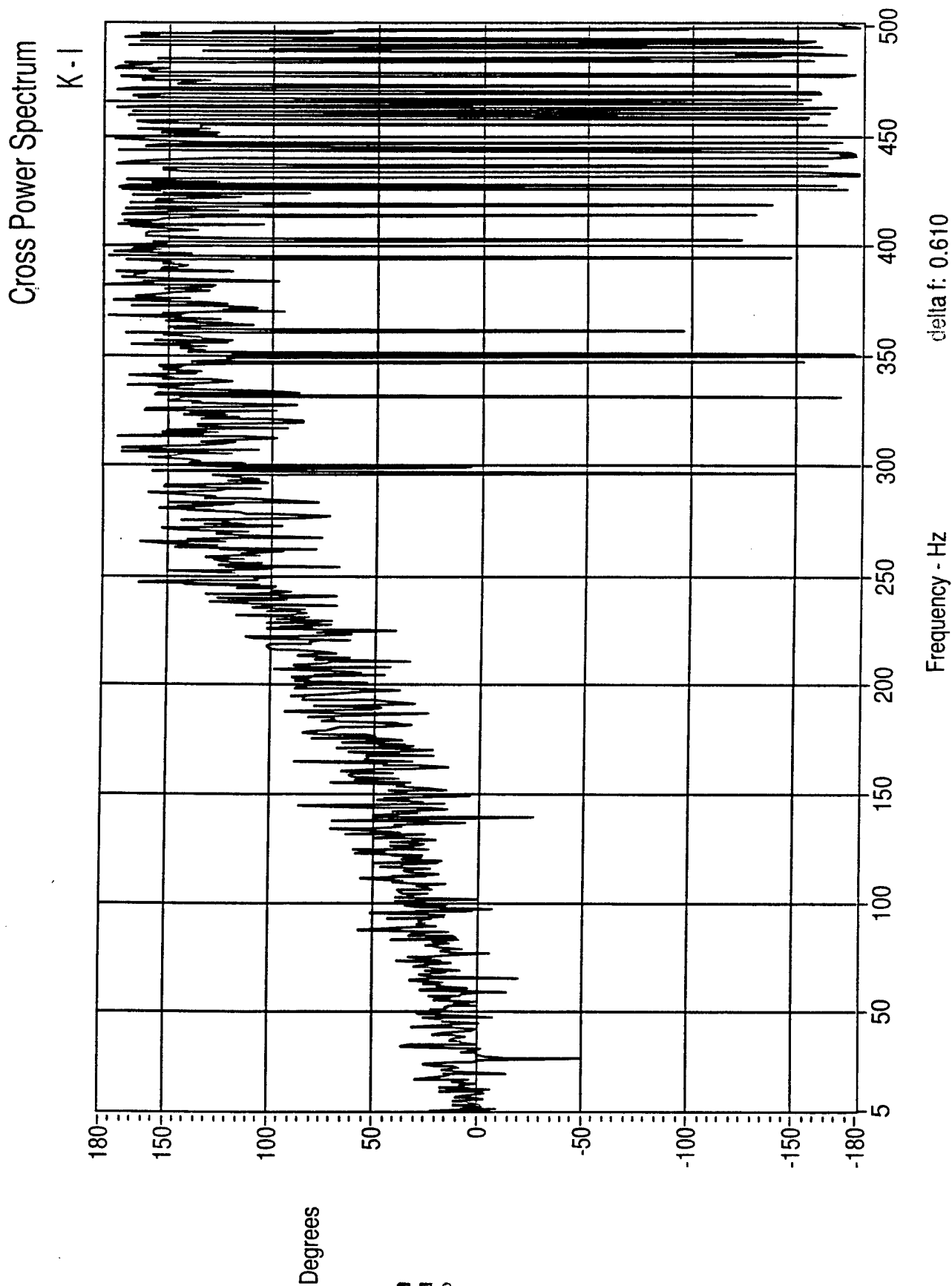
F-15 TPN\_2854: alpha=32 beta=0 bp=0



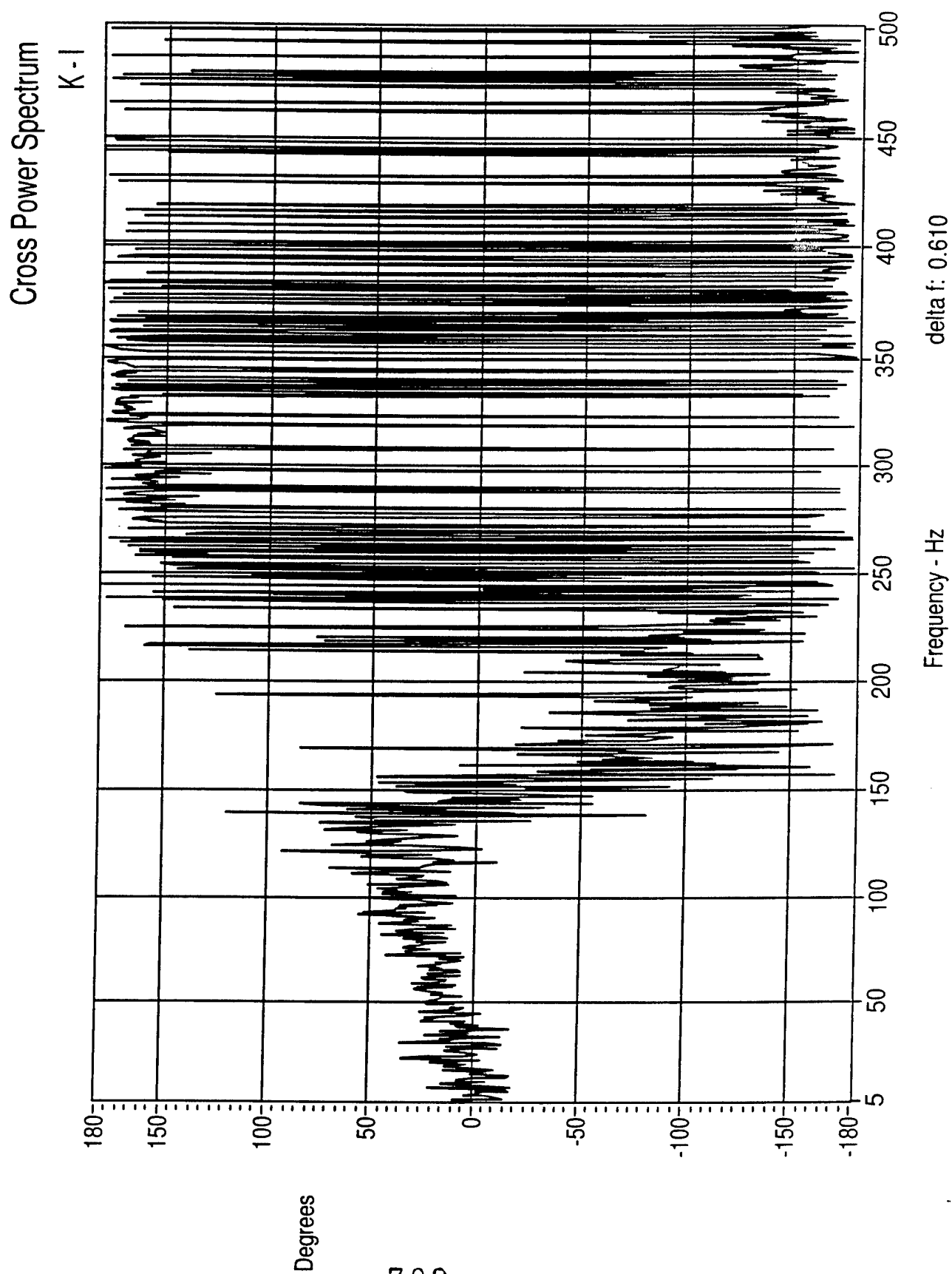
F-15 TPN\_2864: alpha=8 beta=-4 bp=0



F-15 TPN\_2870: alpha=20 beta=-4 bp=0

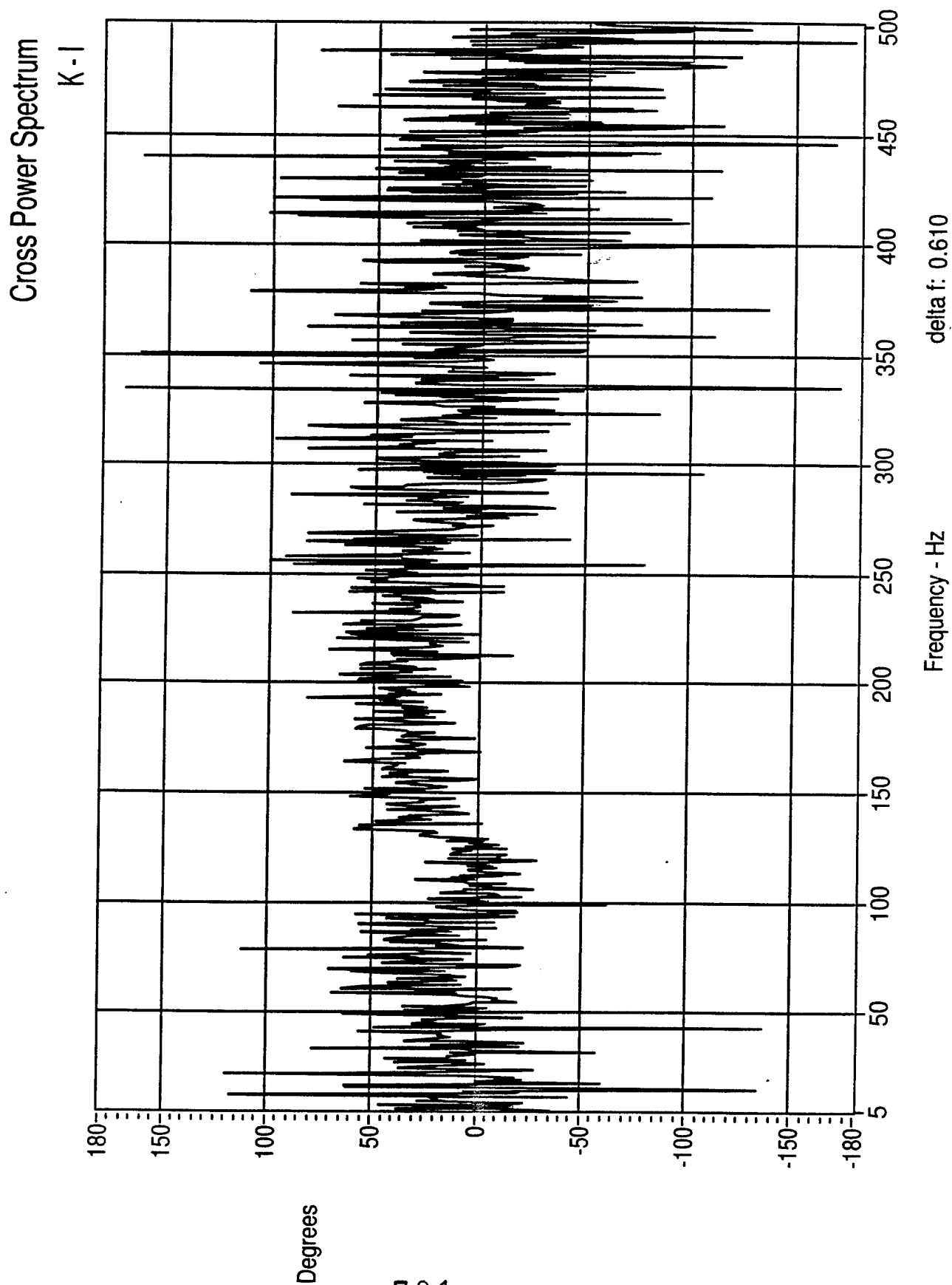


F-15 TPN\_2872: alpha=24 beta=-4 bp=0





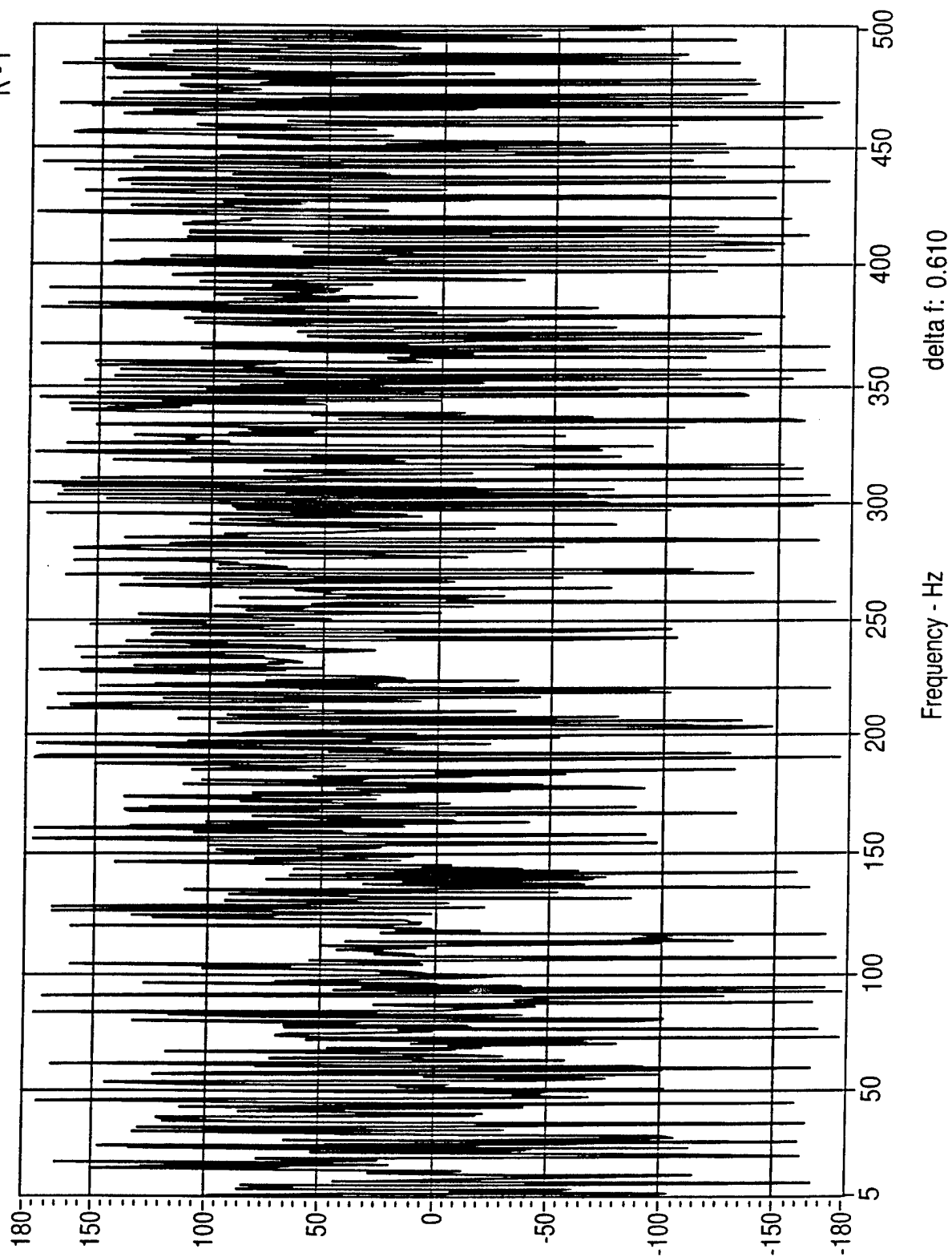
F-15 TPN\_2874: alpha=32 beta=-4 bp=0



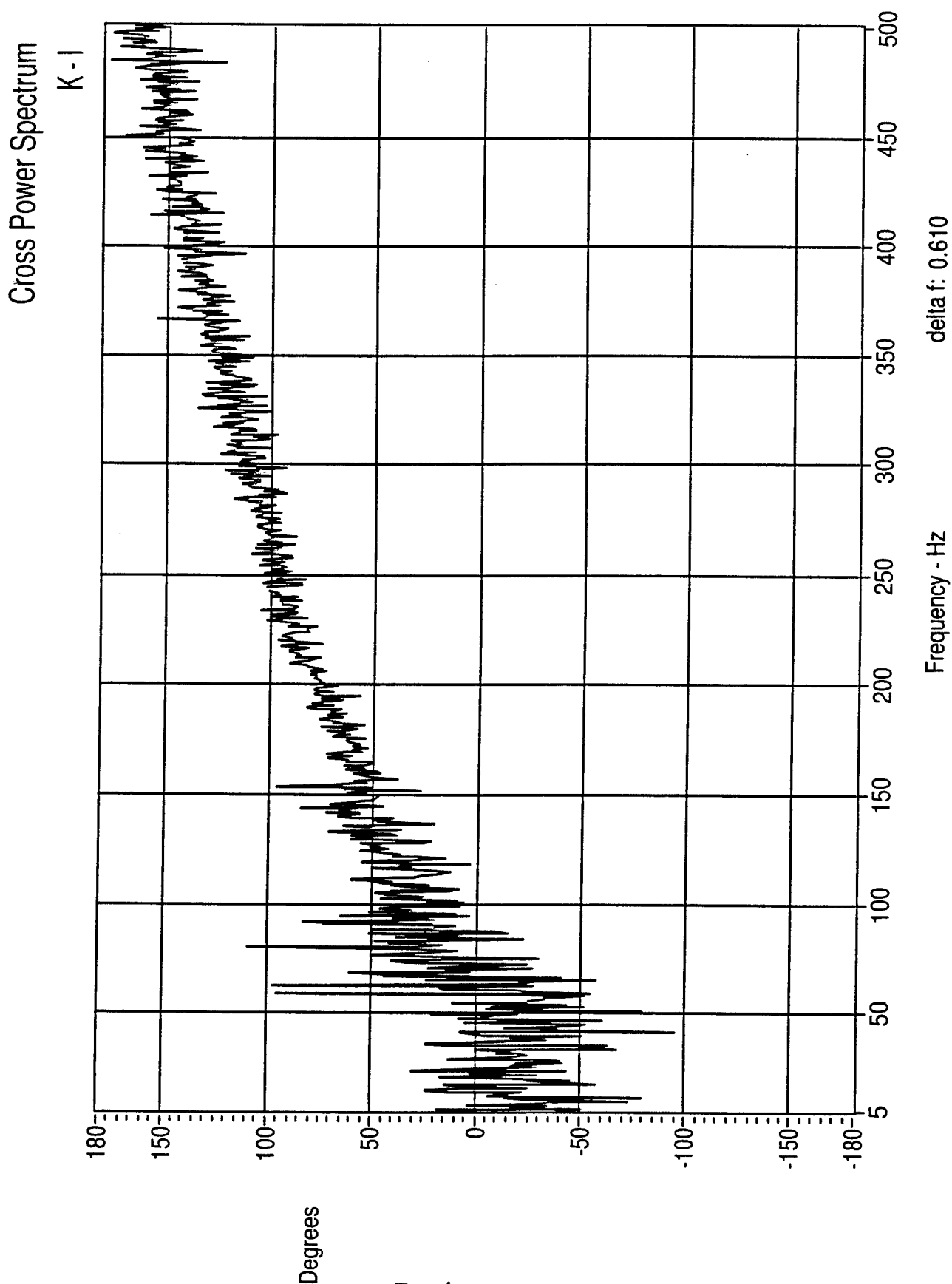
F-15 TPN\_3351: alpha=8 beta=4 bp=45

Cross Power Spectrum

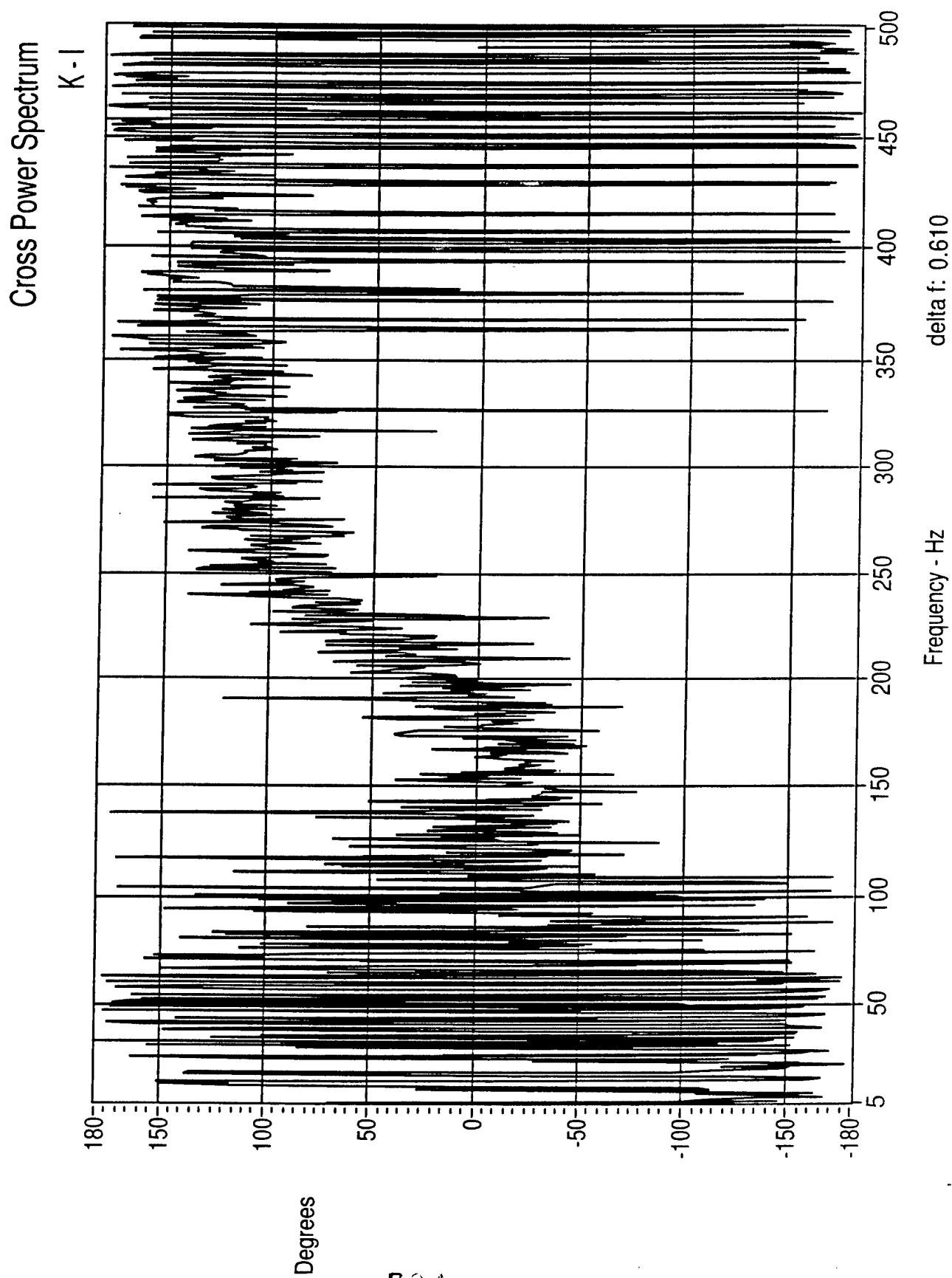
K - I



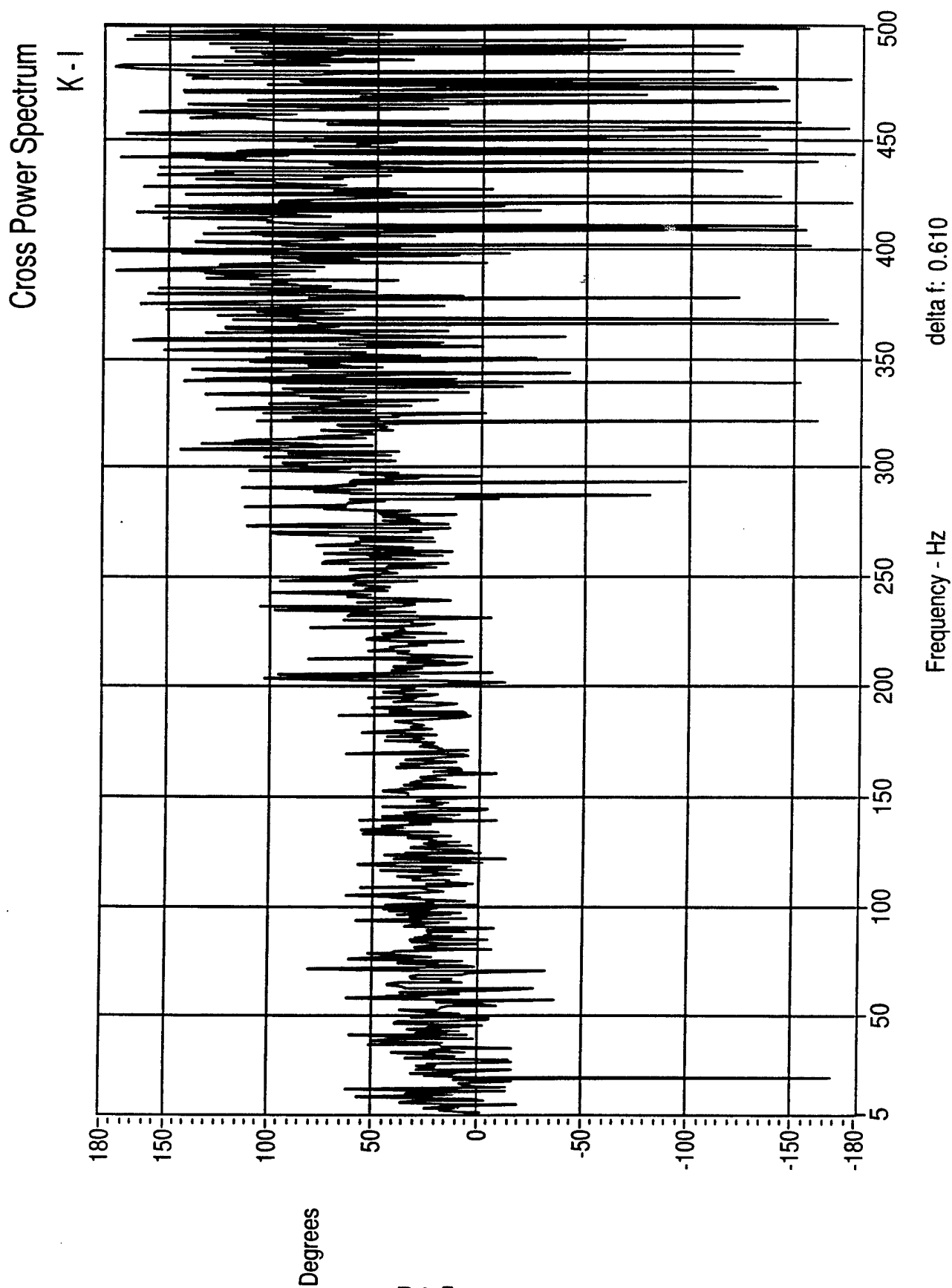
F-15 TPN\_3357: alpha=20 beta=4 bp=45



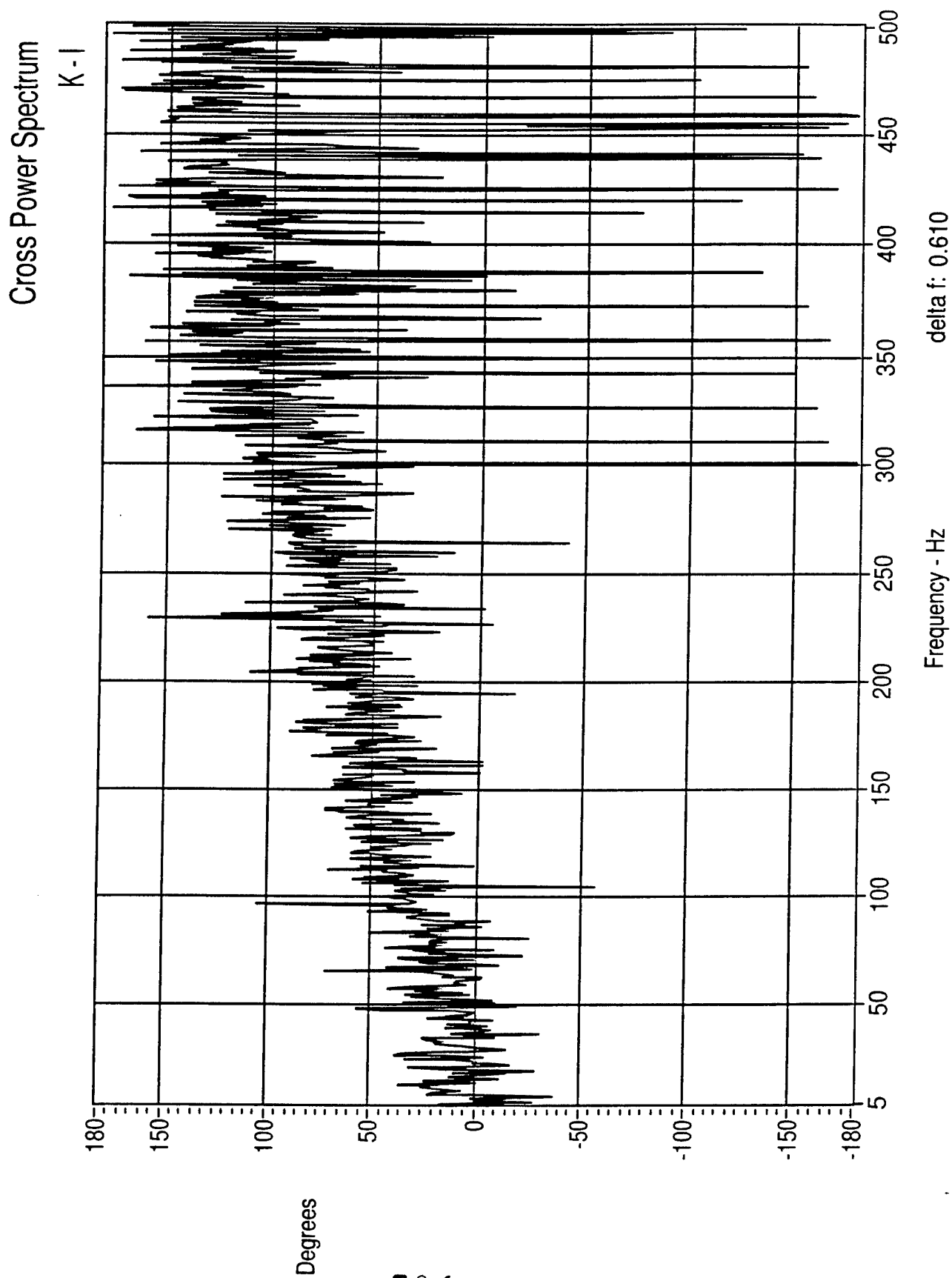
F-15 TPN\_3359: alpha=24 beta=4 bp=45



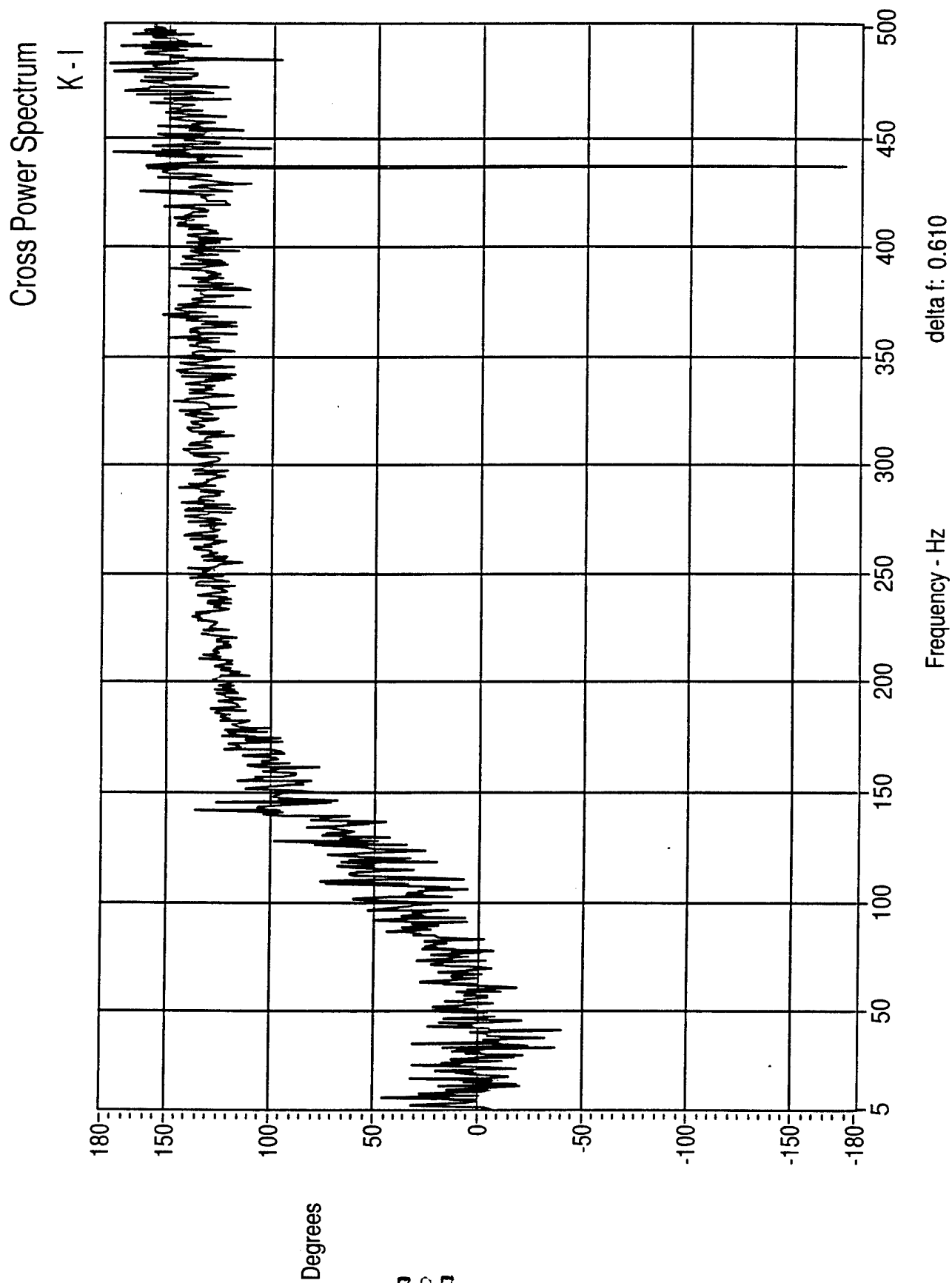
F-15 TPN\_3361: alpha=32 beta=4 bp=45



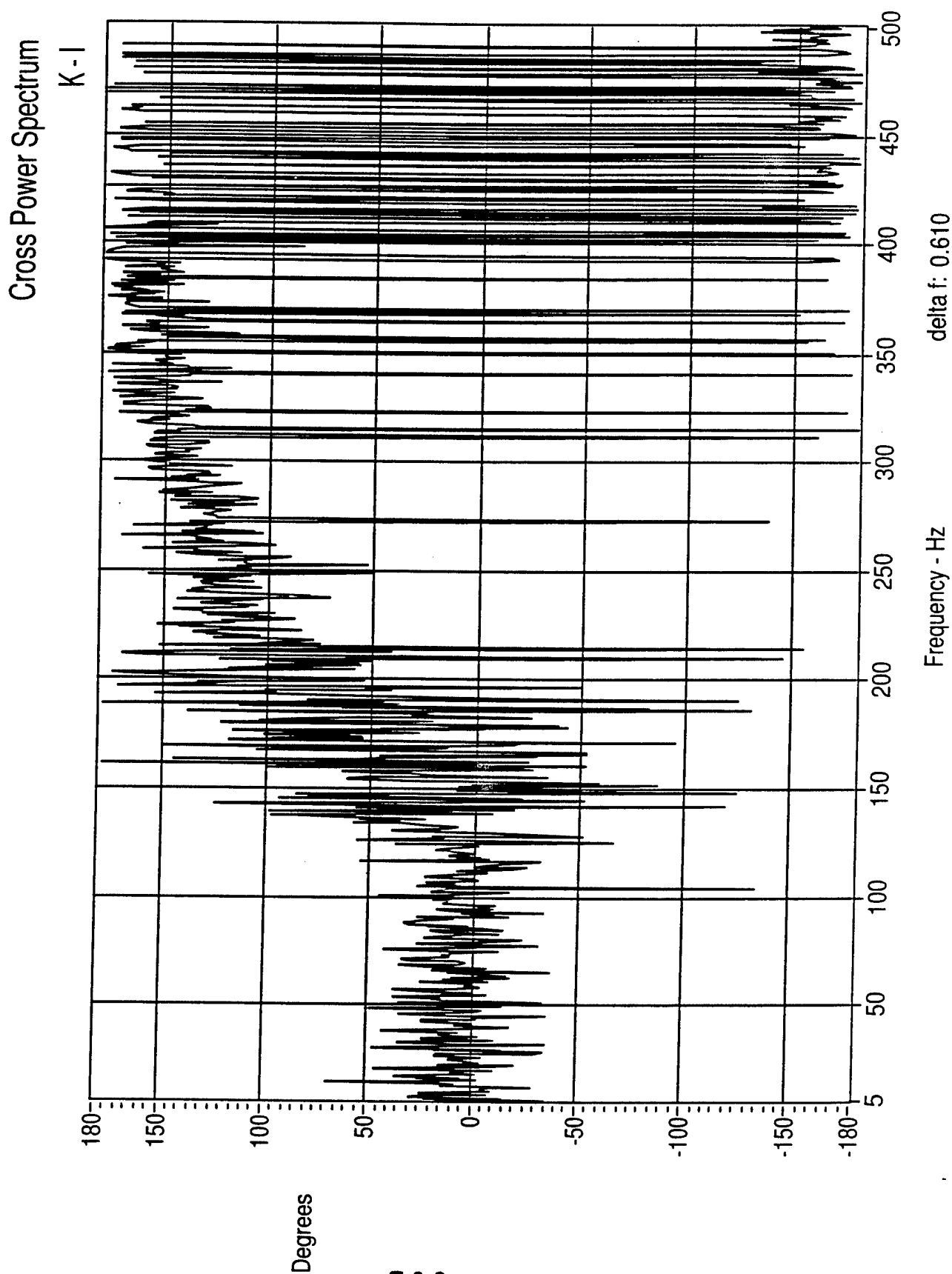
F-15 TPN\_3333: alpha=8 beta=0 bp=45



F-15 TPN\_3339: alpha=20 beta=0 bp=45

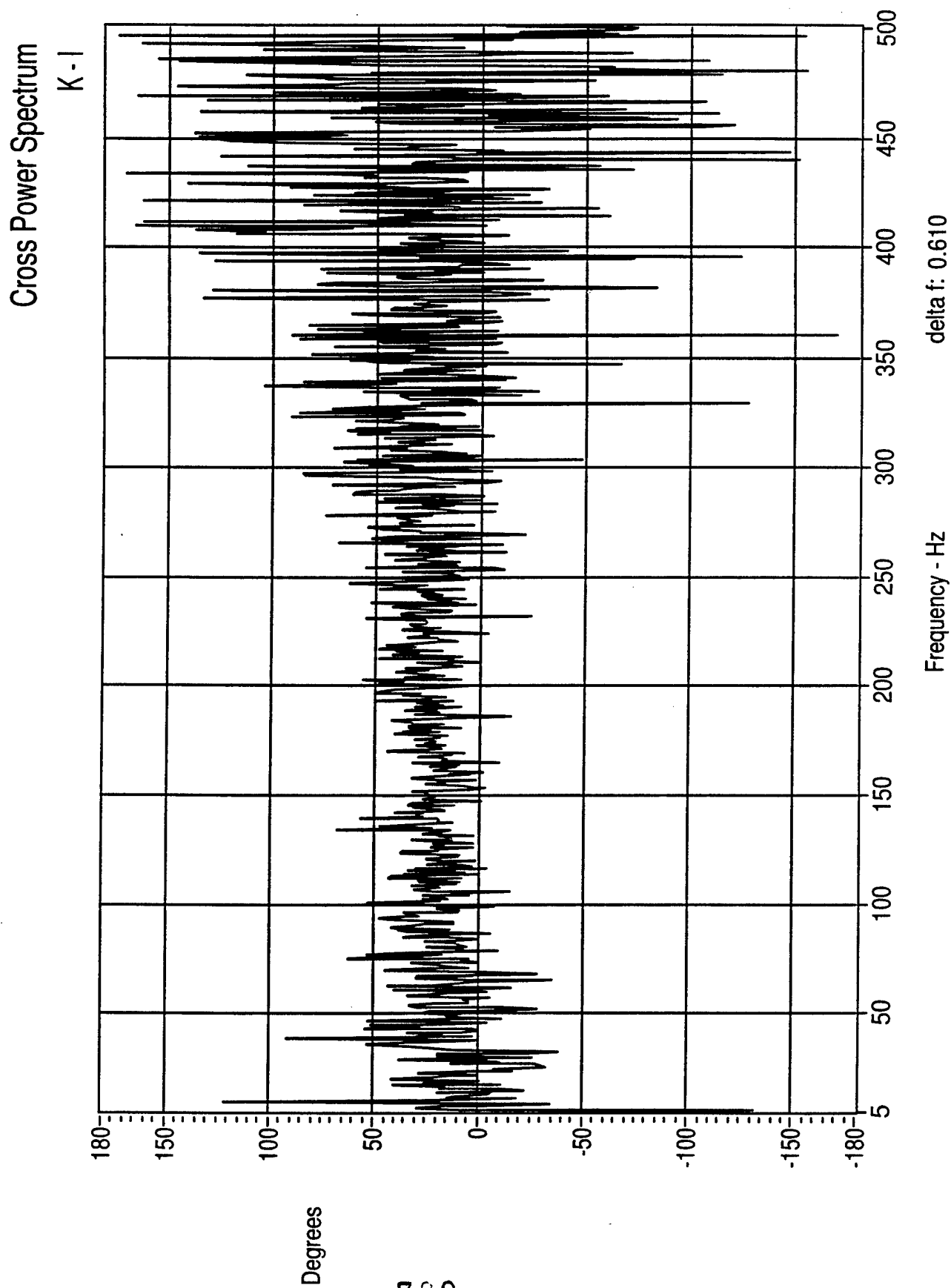


F-15 TPN\_3341: alpha=24 beta=0 bp=45

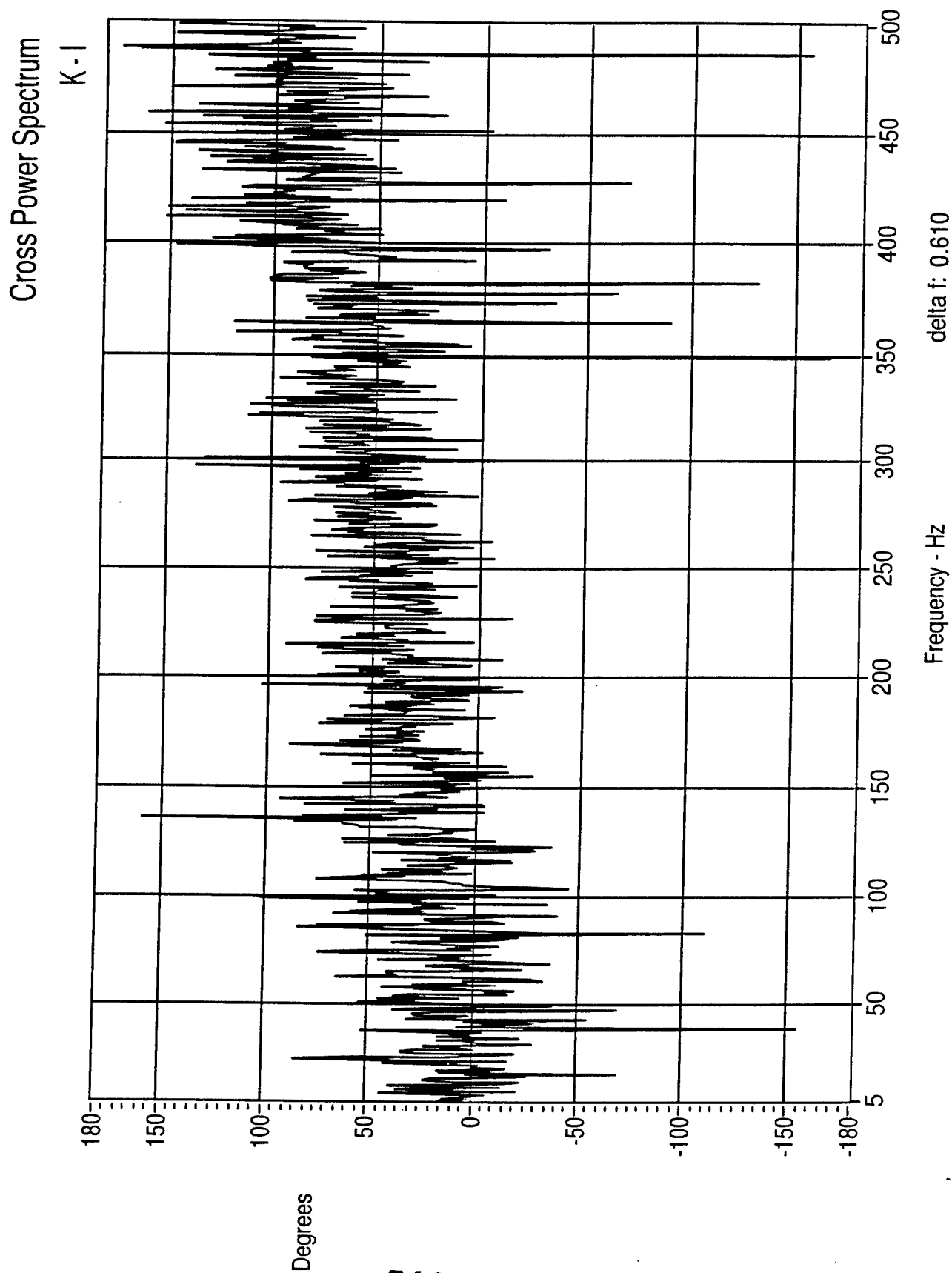




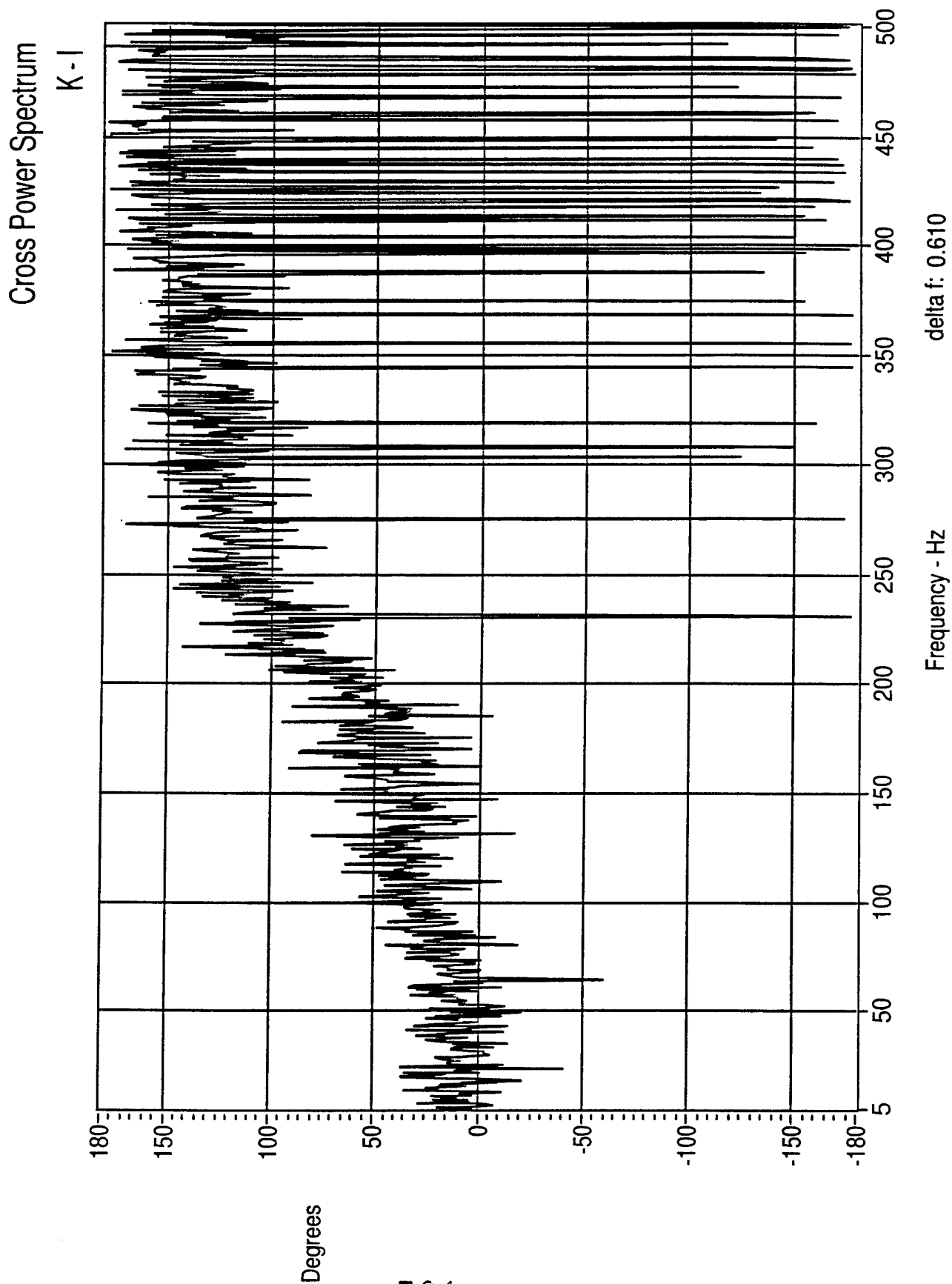
F-15 TPN\_3343: alpha=32 beta=0 bp=45



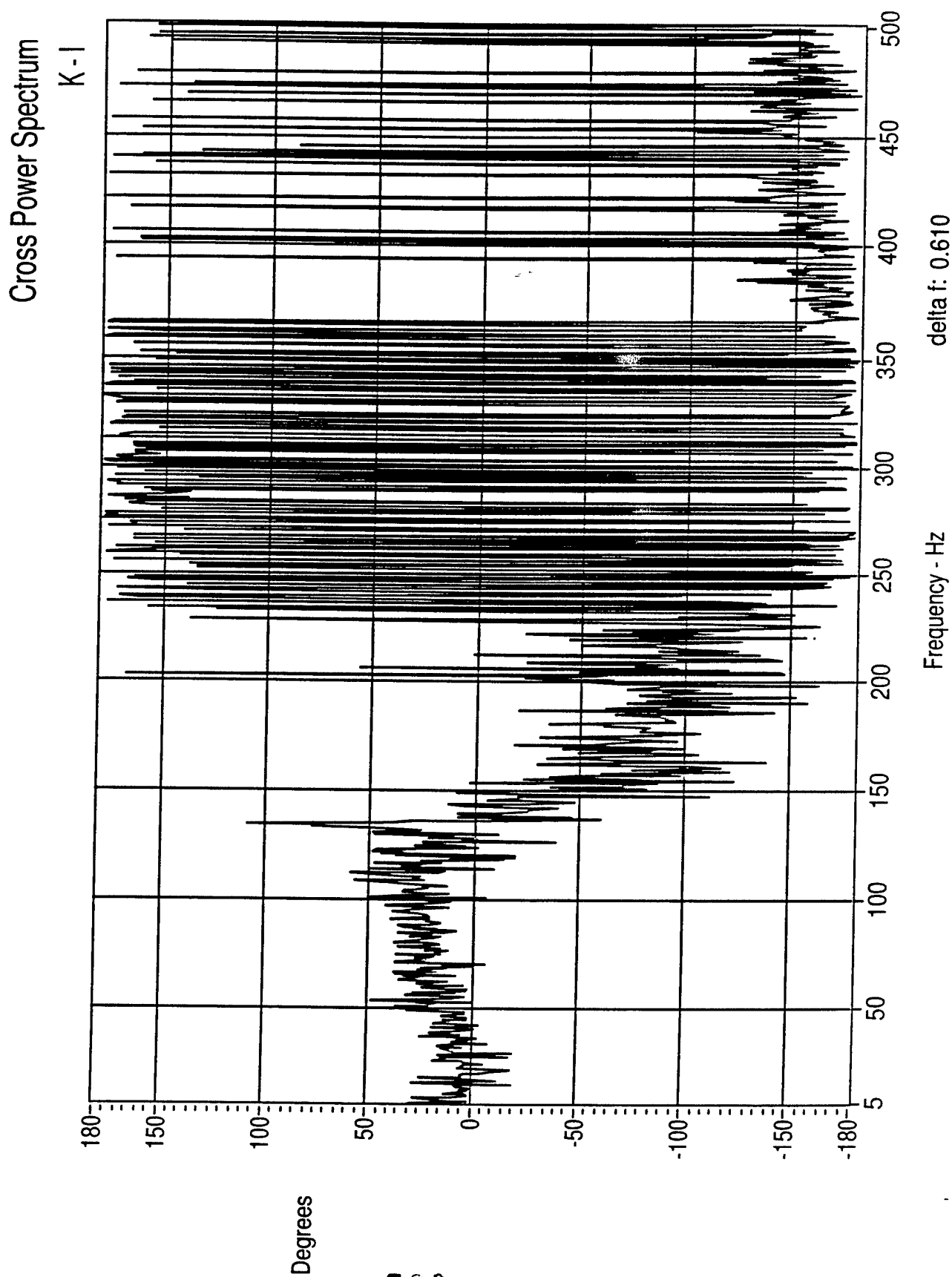
F-15 TPN\_3369: alpha=8 beta=-4 bp=45



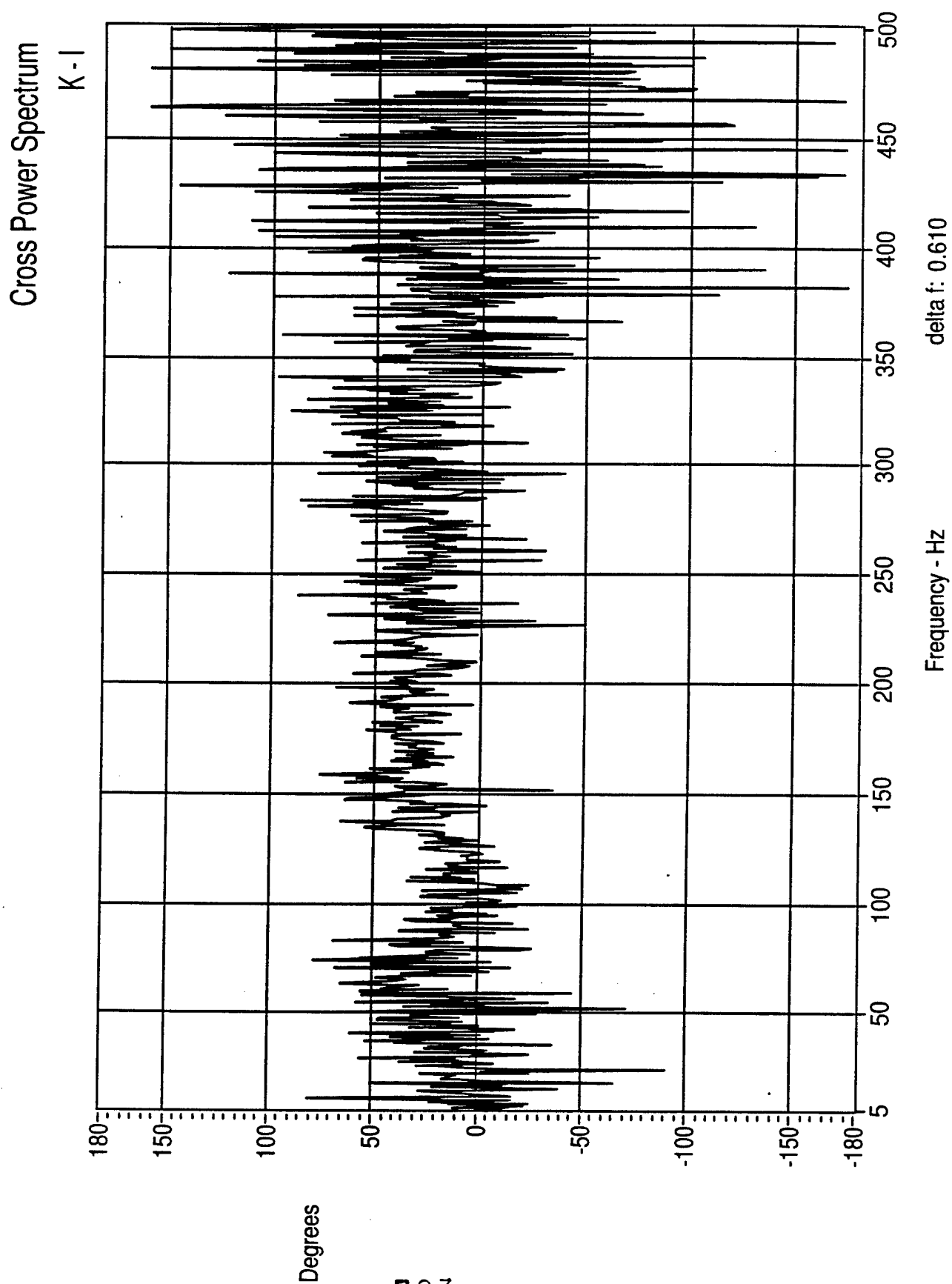
F-15 TPN\_3375: alpha=20 beta=-4 bp=45



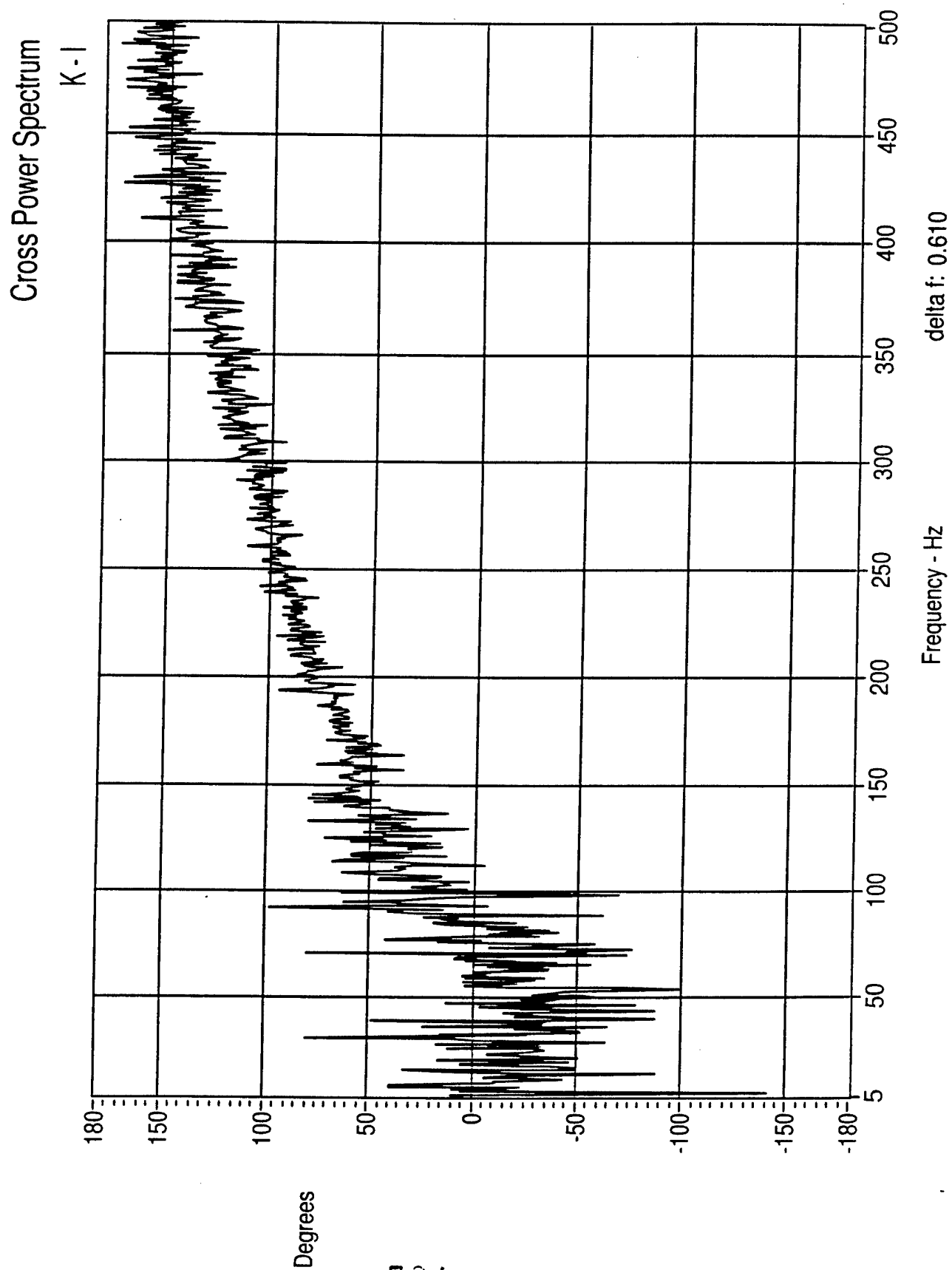
F-15 TPN\_3377: alpha=24 beta=-4 bp=45



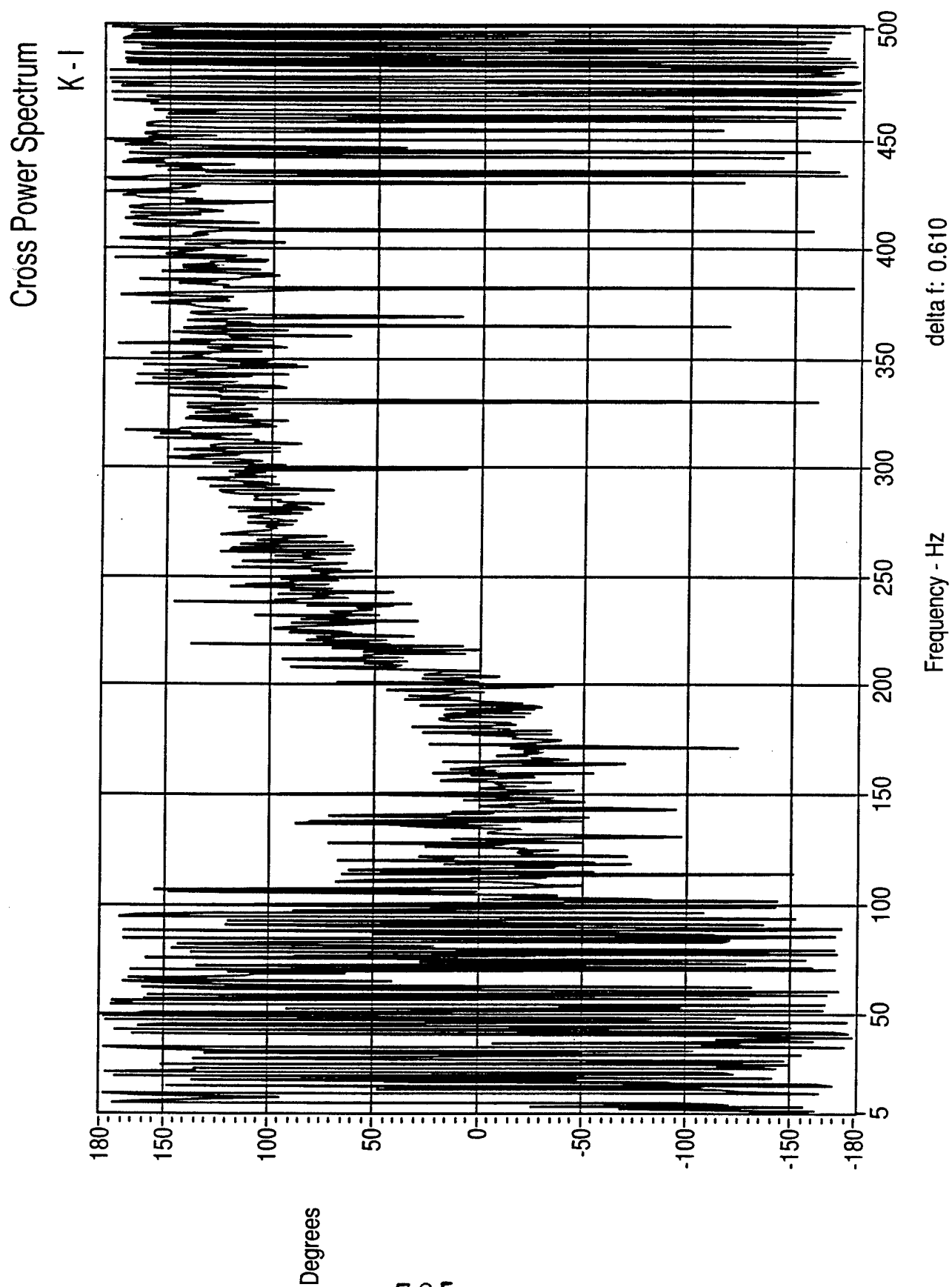
F-15 TPN\_3379: alpha=32 beta=-4 bp=45



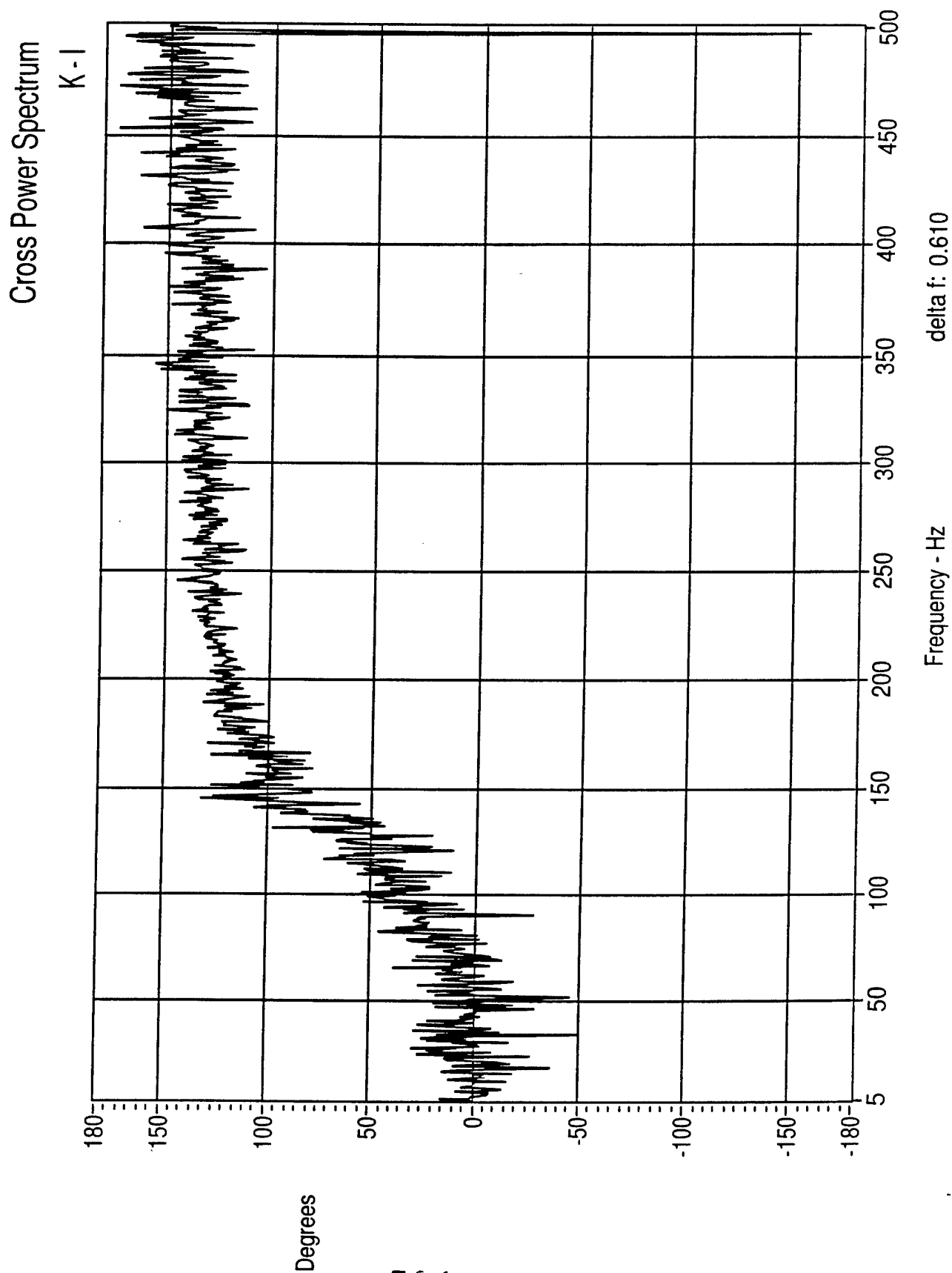
F-15 TPN\_3046: alpha=20 beta=4 bp=65



F-15 TPN\_3048: alpha=24 beta=4 bp=65

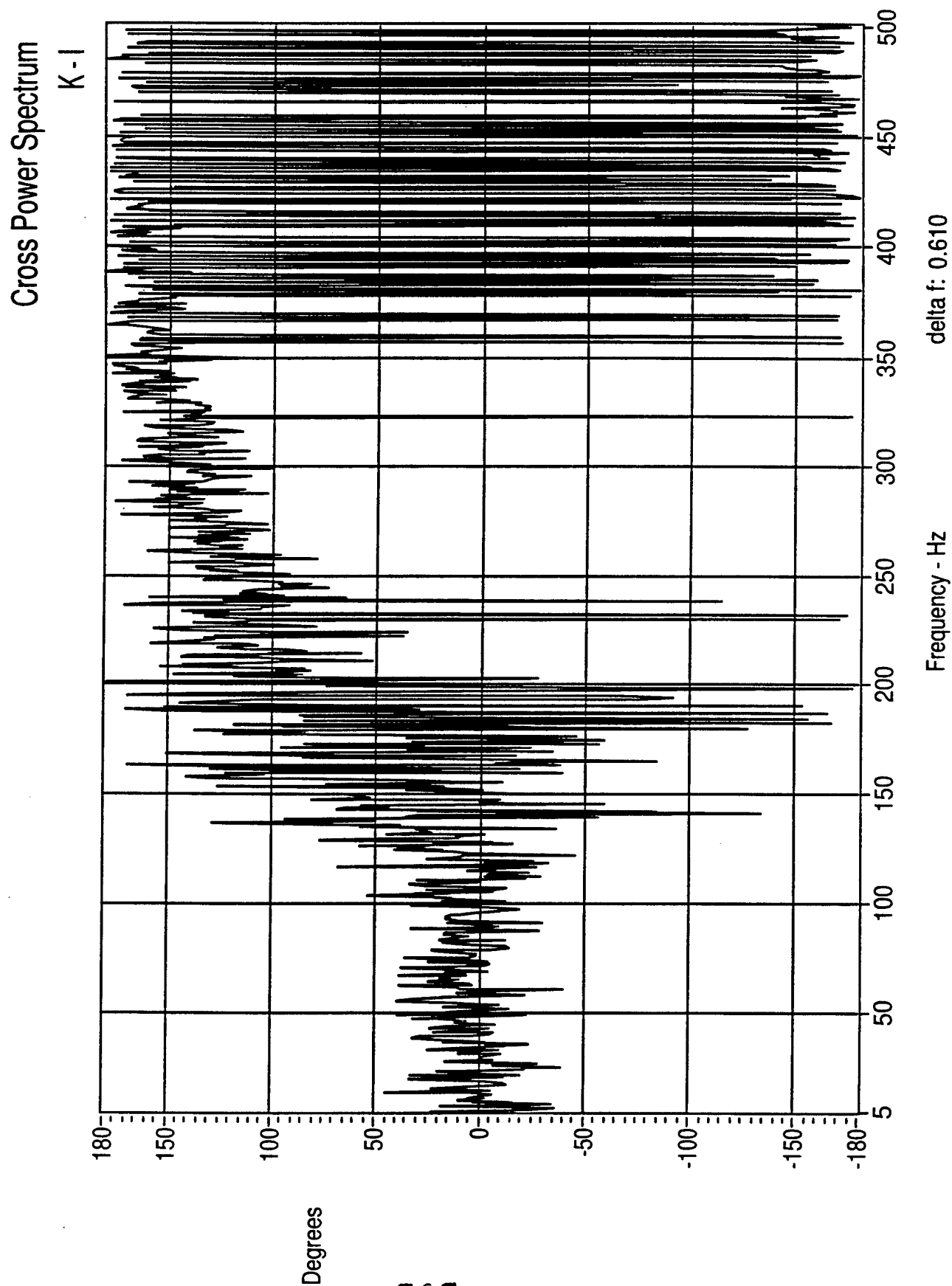


F-15 TPN\_3040: alpha=20 beta=0 bp=65

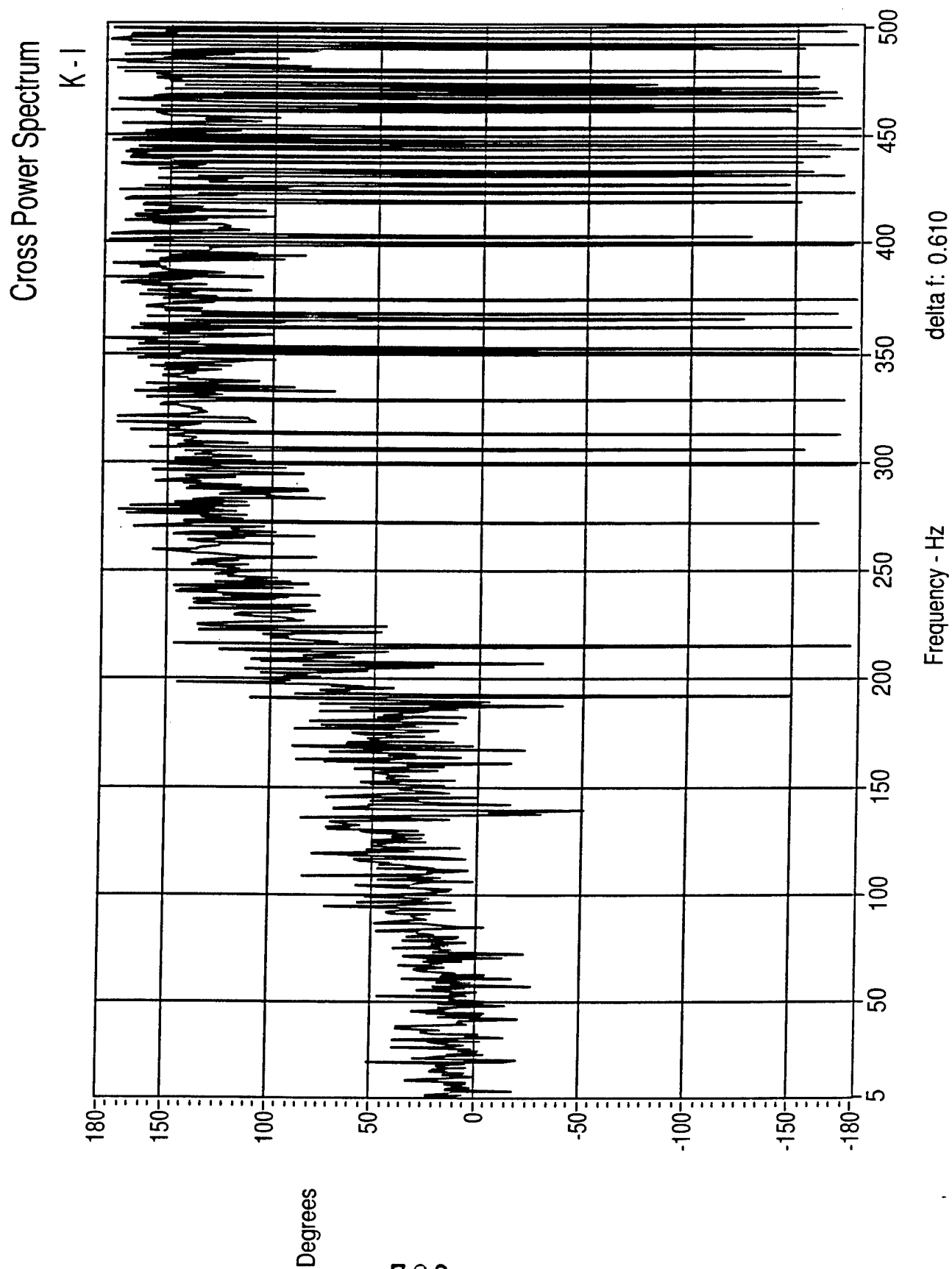




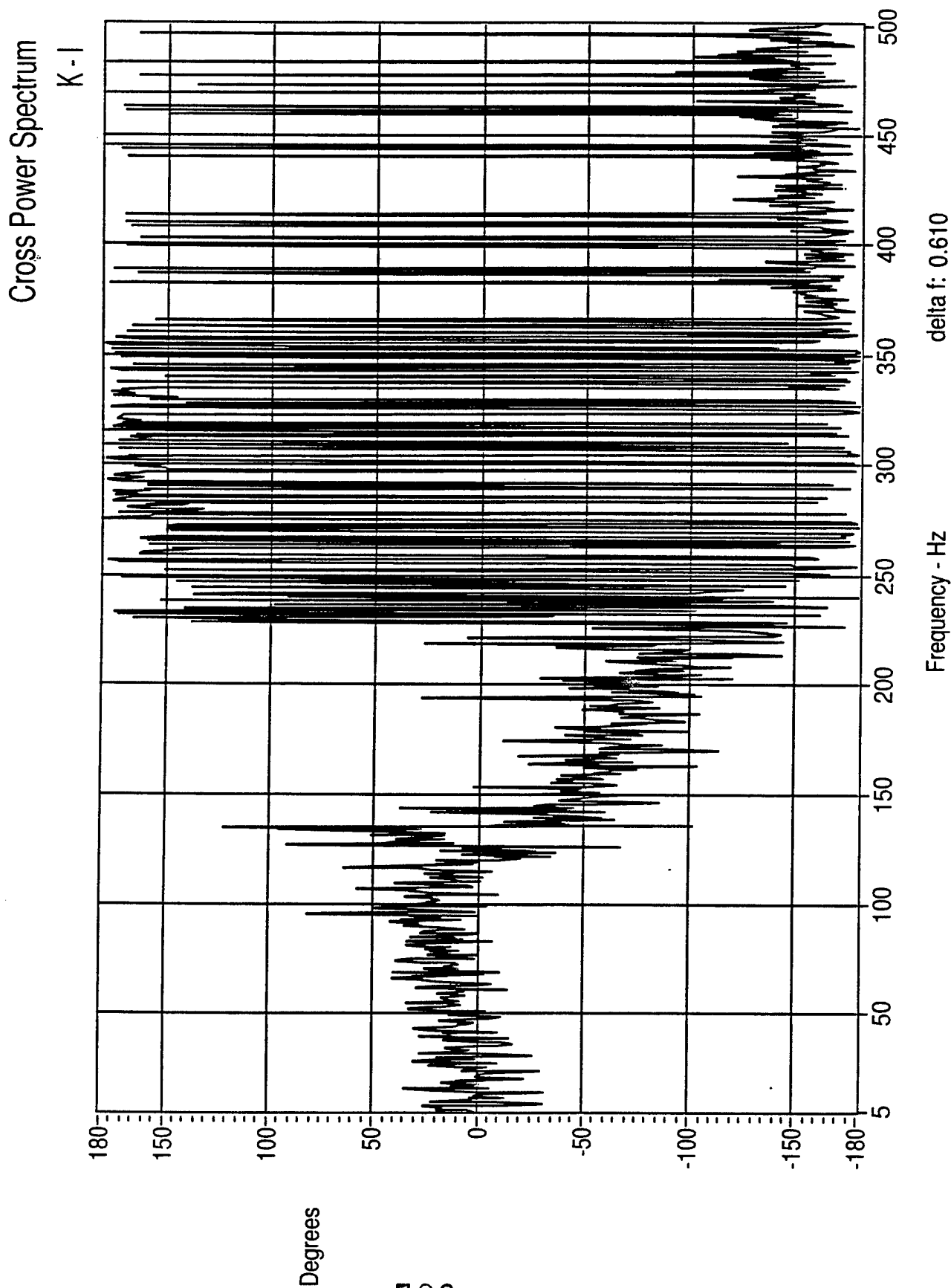
F-15 TPN\_3042: alpha=24 beta=0 bp=65



F-15 TPN\_3034: alpha=20 beta=-4 bp=65



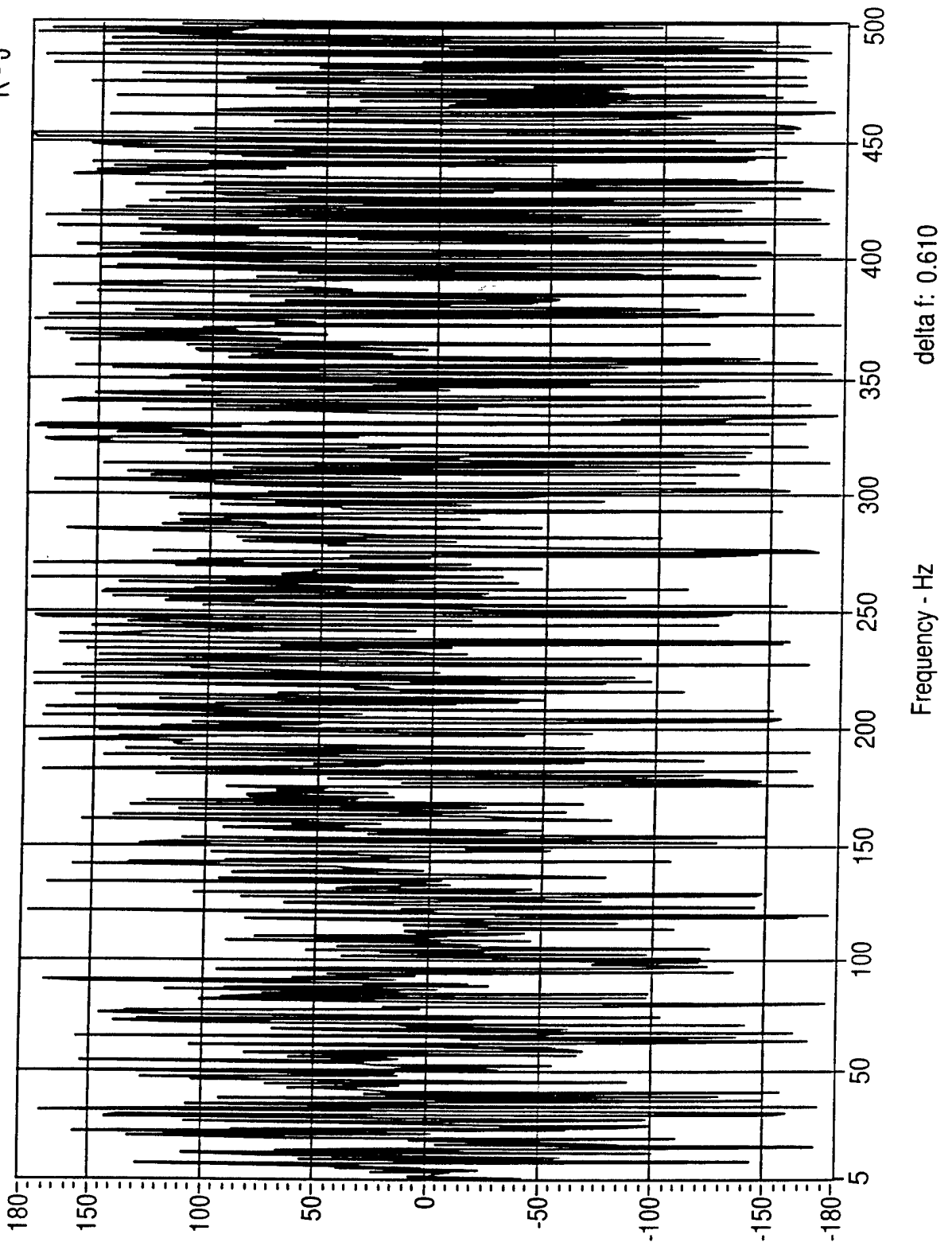
F-15 TPN\_3036: alpha=24 beta=-4 bp=65



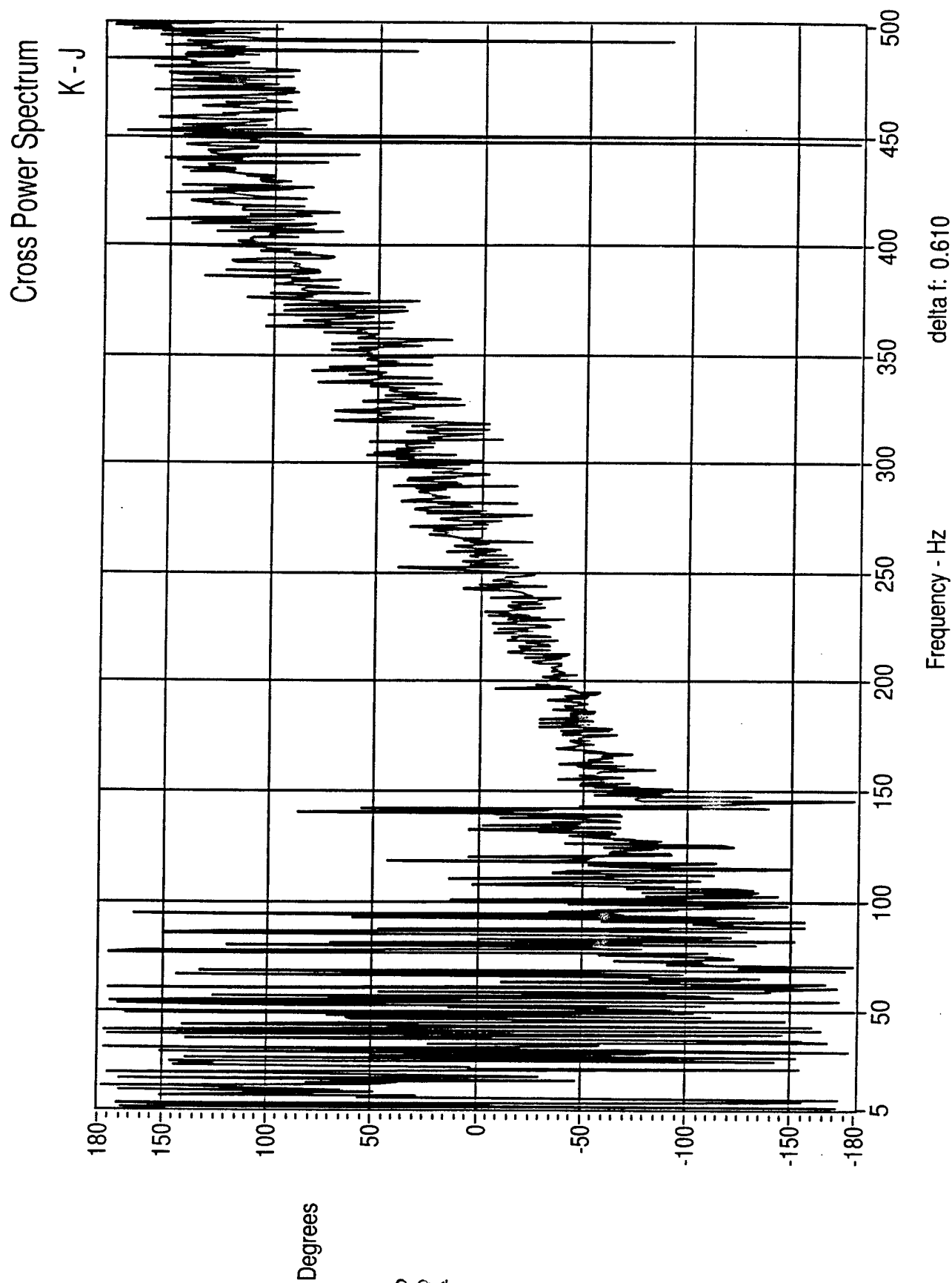
F-15 TPN\_2918: alpha=8 beta=4 bp=0

Cross Power Spectrum

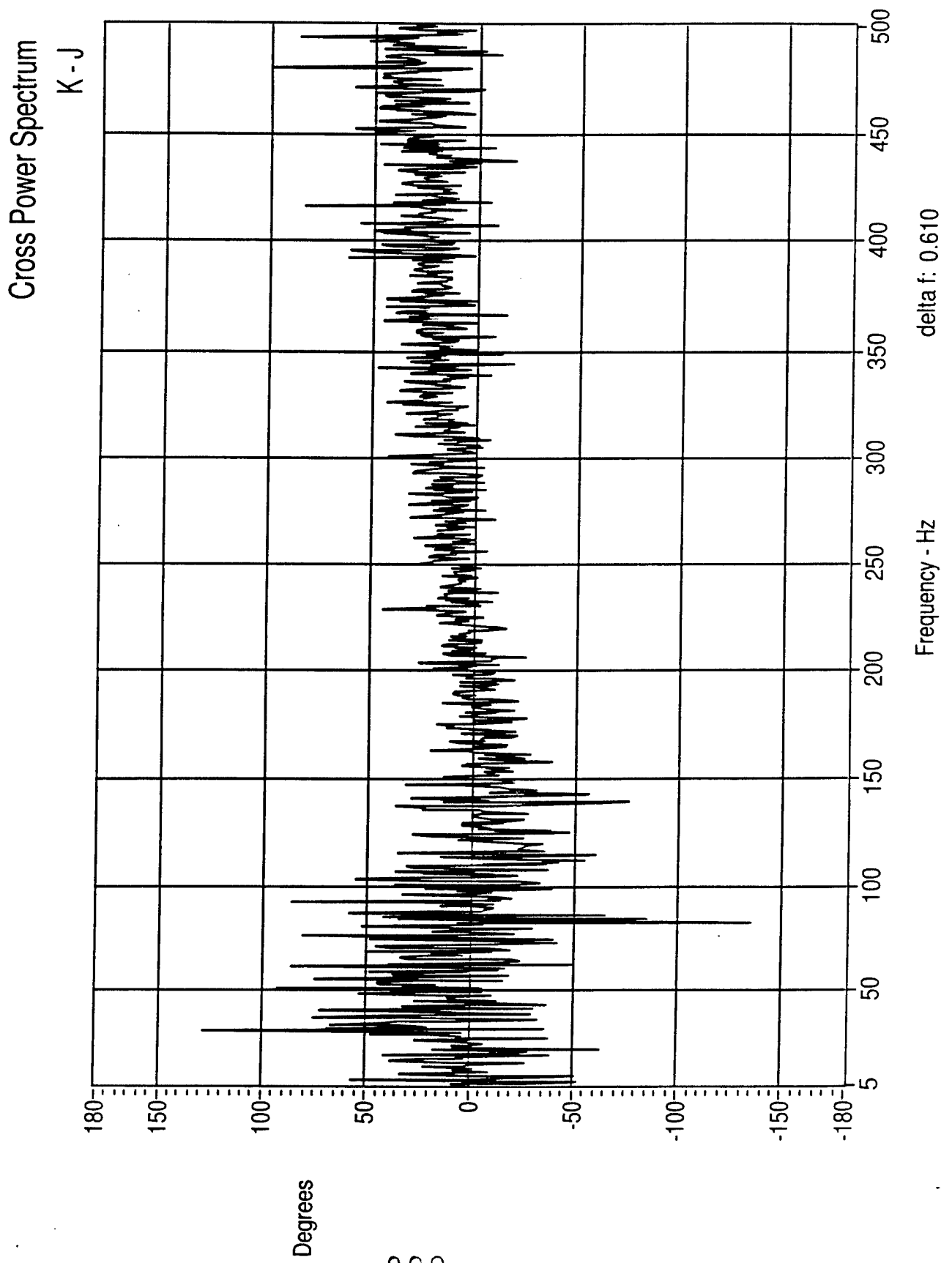
K - J



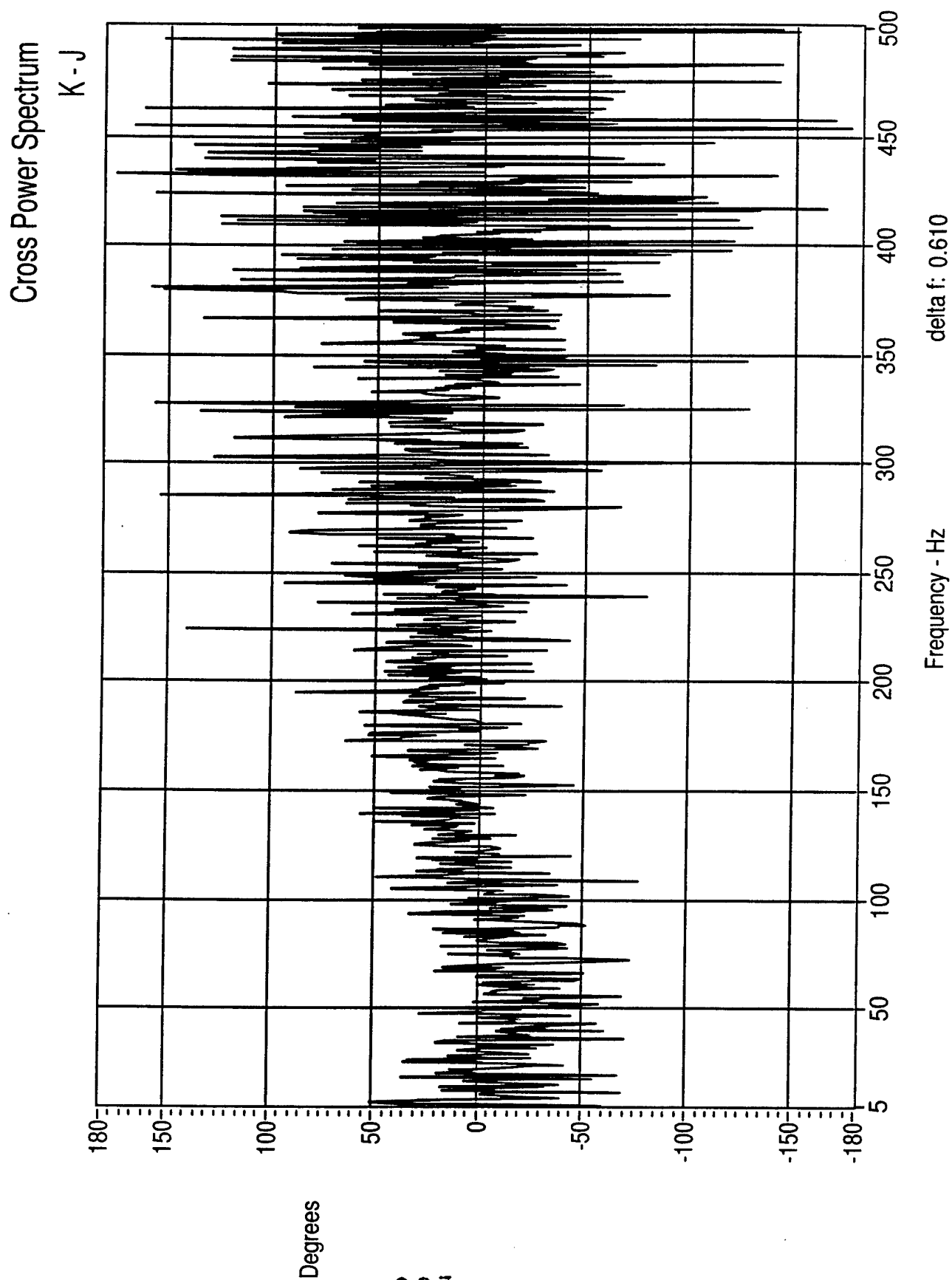
F-15 TPN\_2924: alpha=20 beta=4 bp=0



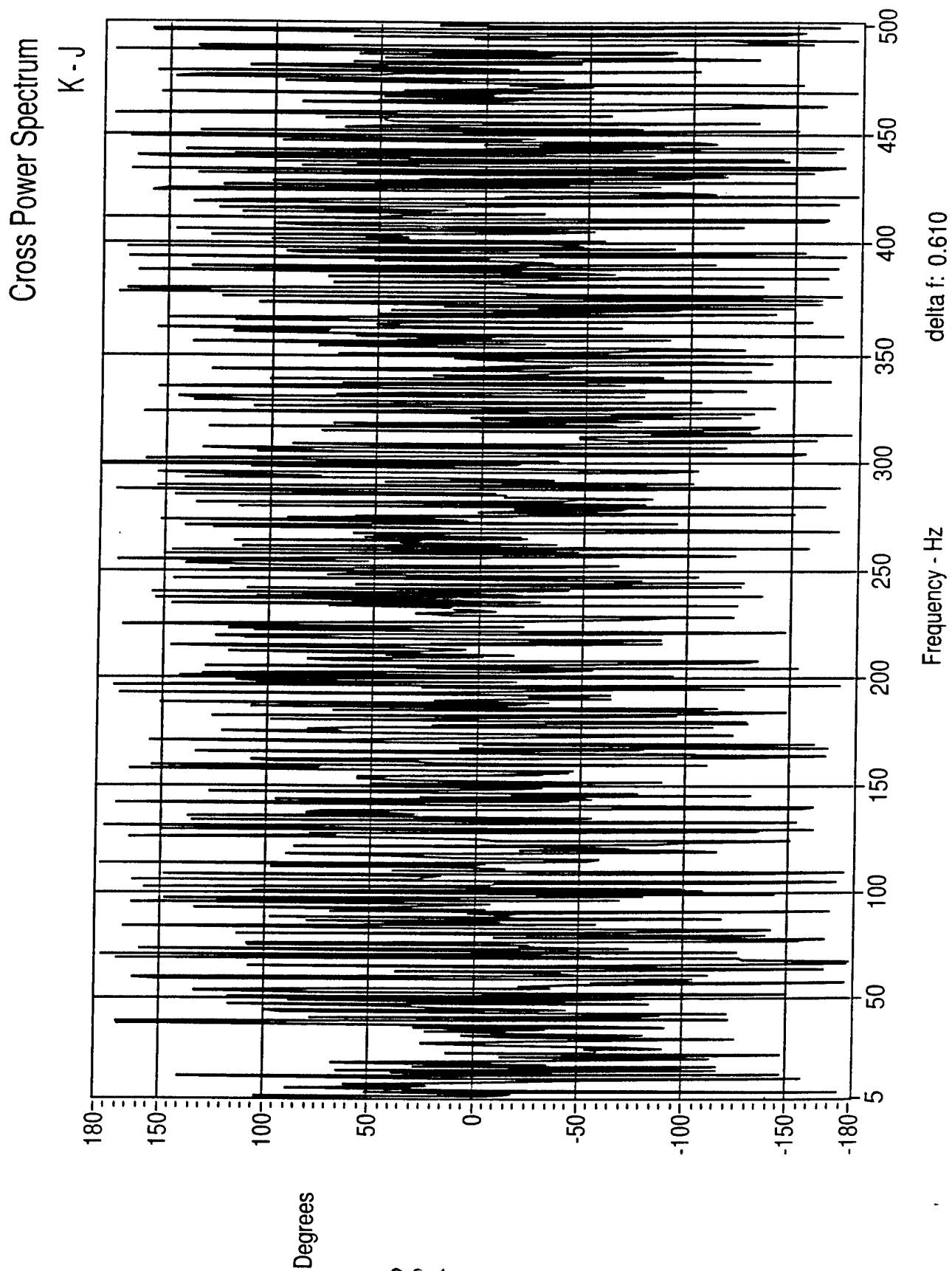
F-15 TPN\_2926: alpha=24 beta=4 bp=0



F-15 TPN\_2928: alpha=32 beta=4 bp=0

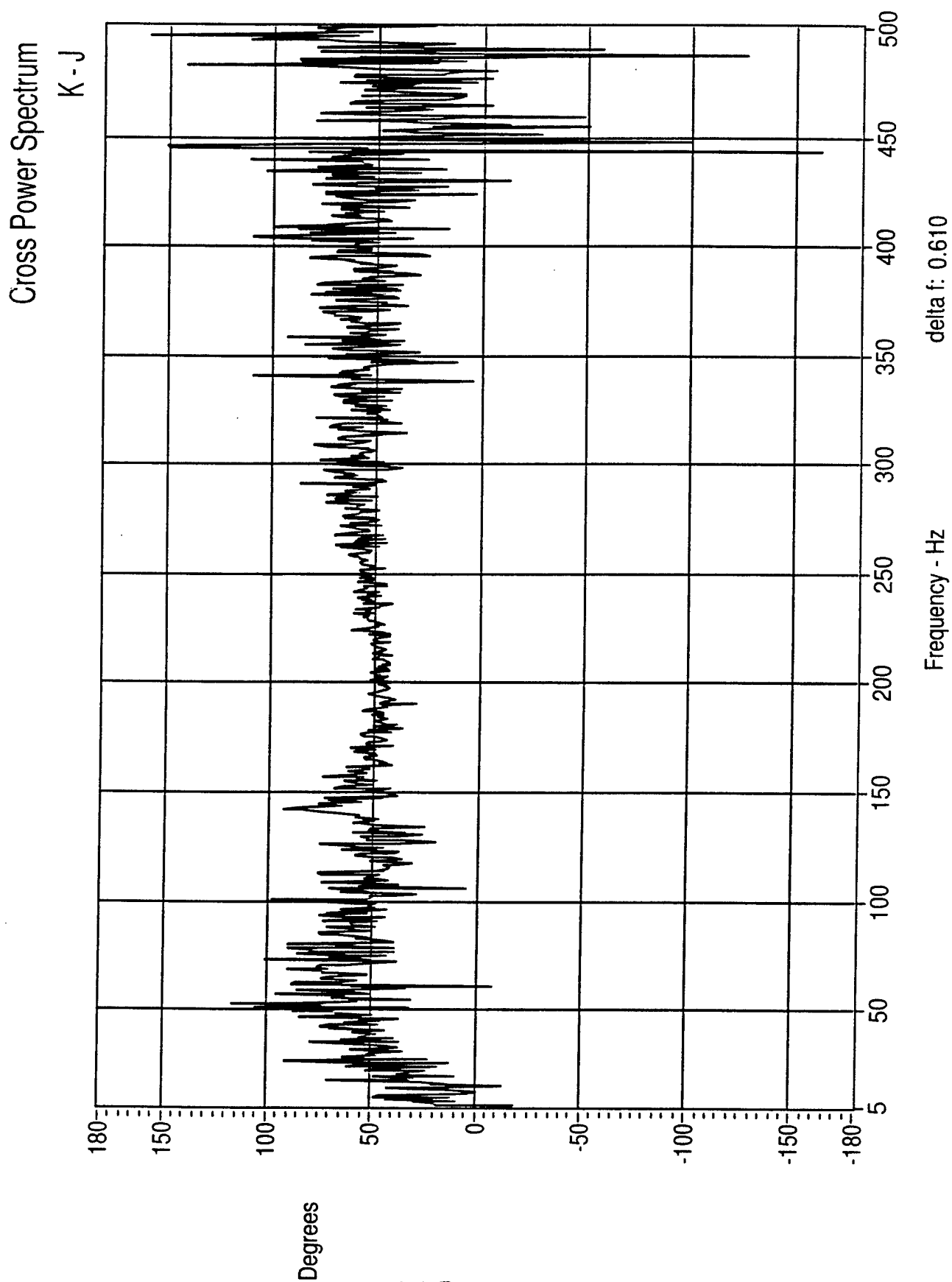


F-15 TPN\_2844: alpha=8 beta=0 bp=0

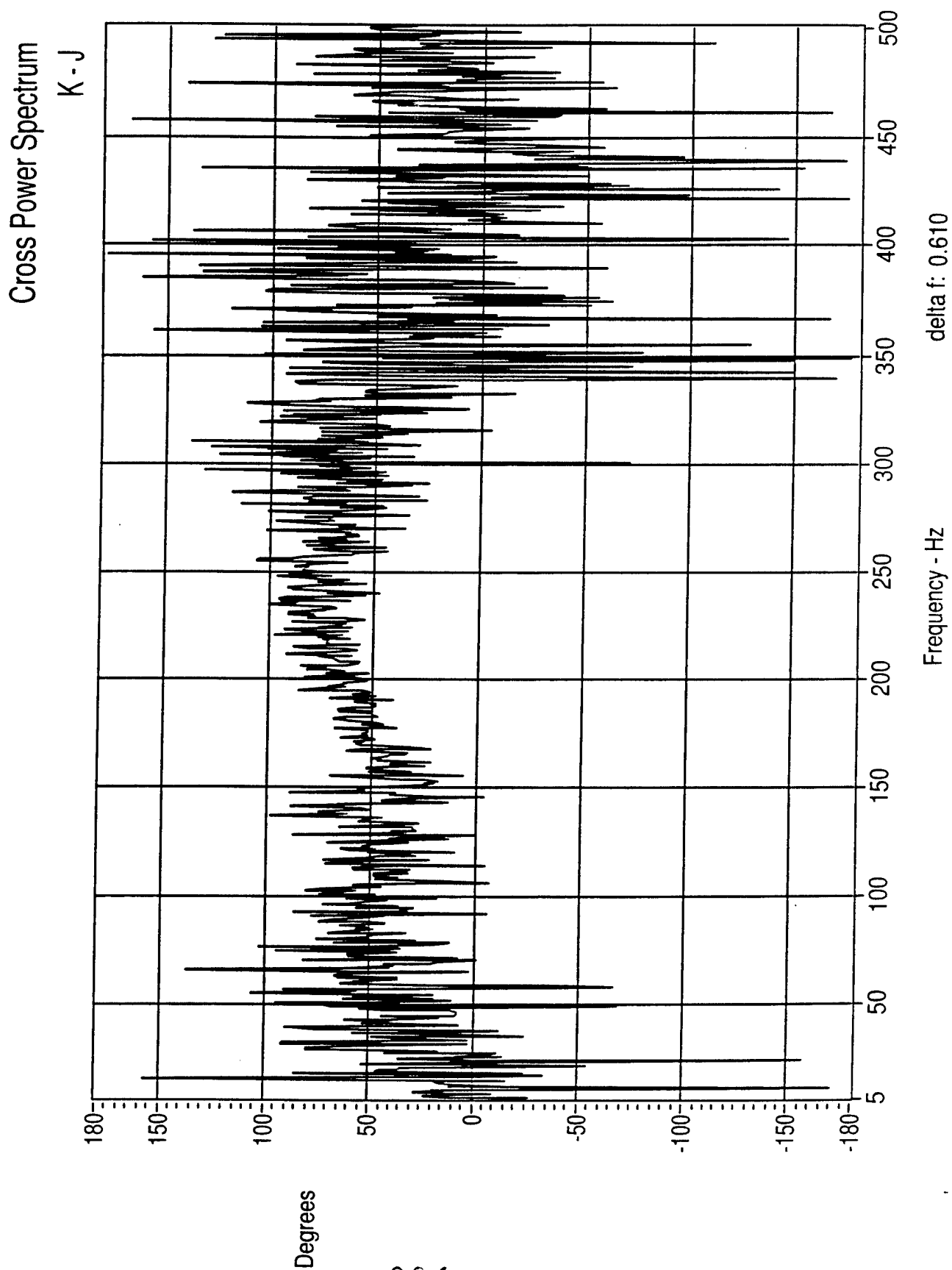




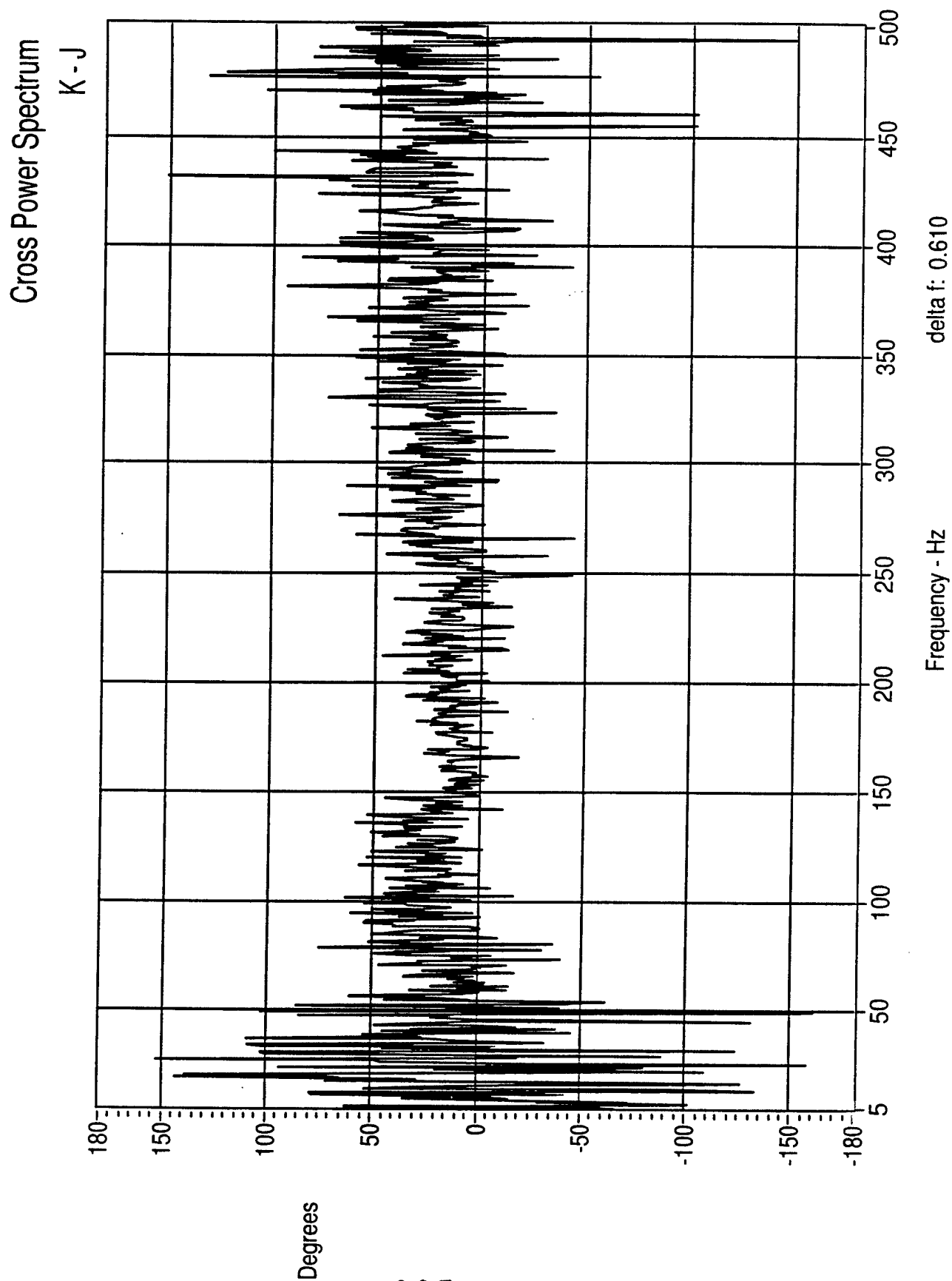
F-15 TPN\_2850: alpha=20 beta=0 bp=0



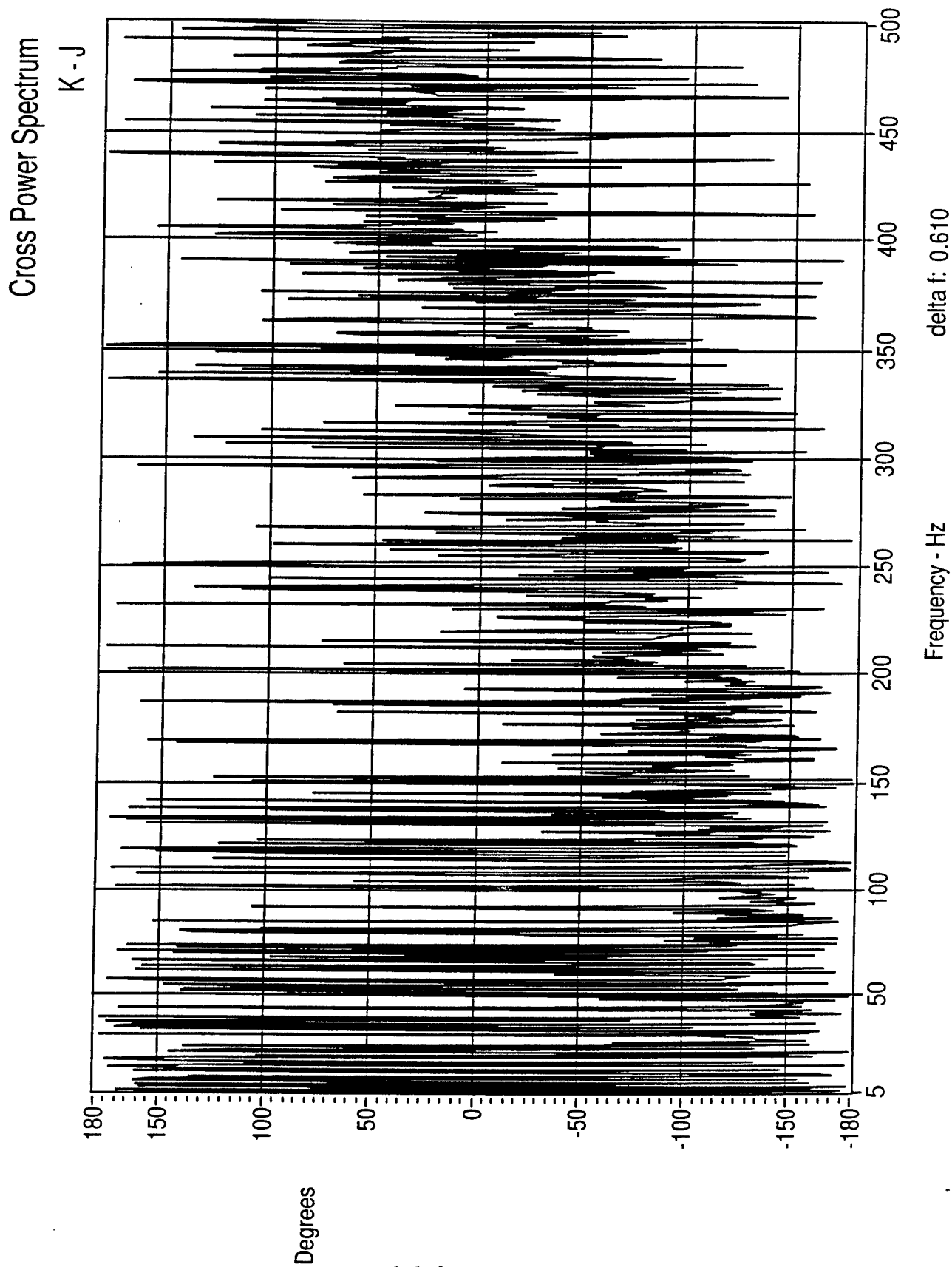
F-15 TPN\_2852: alpha=24 beta=0 bp=0



F-15 TPN\_2854: alpha=32 beta=0 bp=0



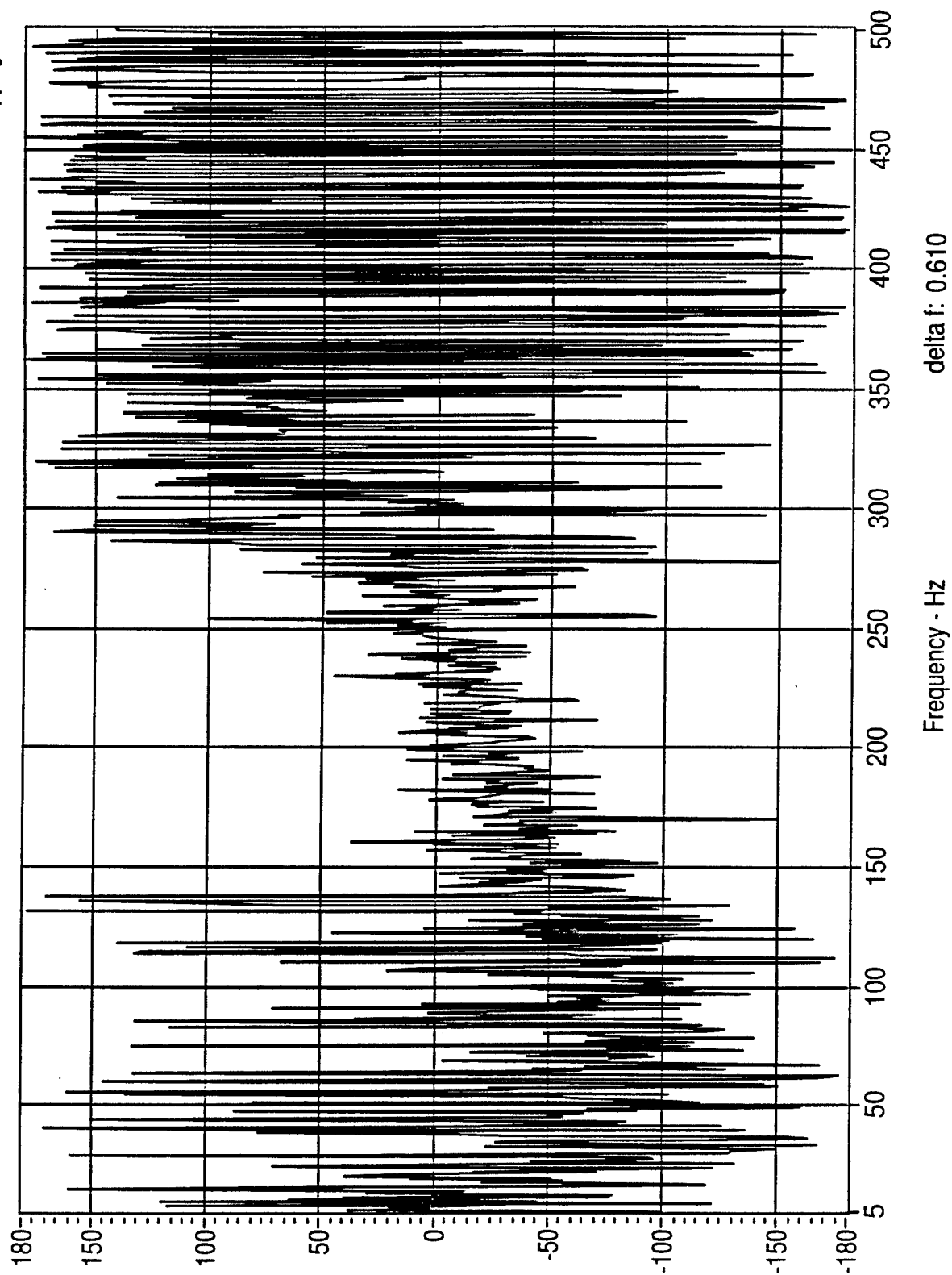
F-15 TPN\_2864: alpha=8 beta=-4 bp=0



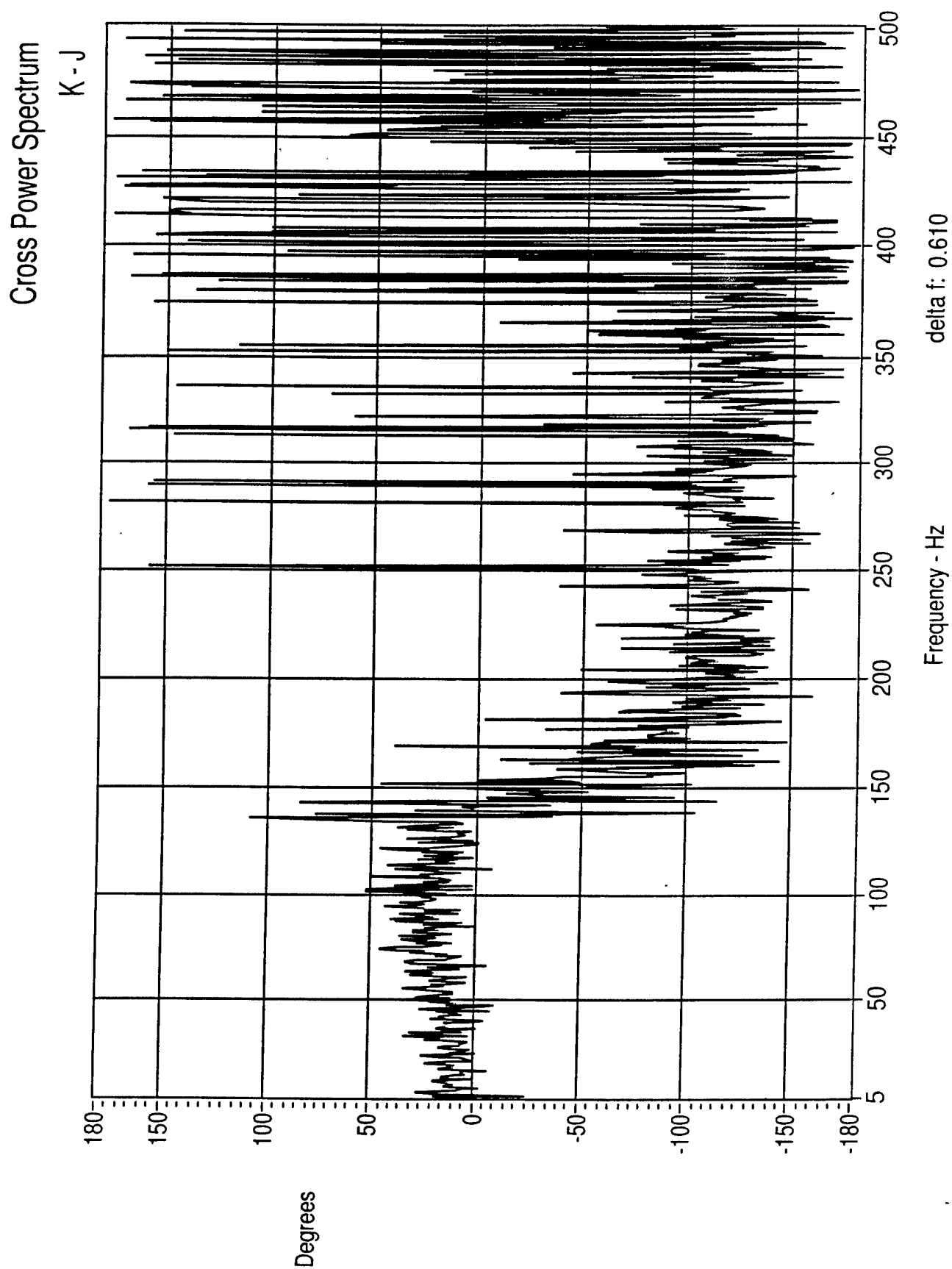
F-15 TPN\_2870:  $\alpha=20$   $\beta=-4$   $\beta=0$

Cross Power Spectrum

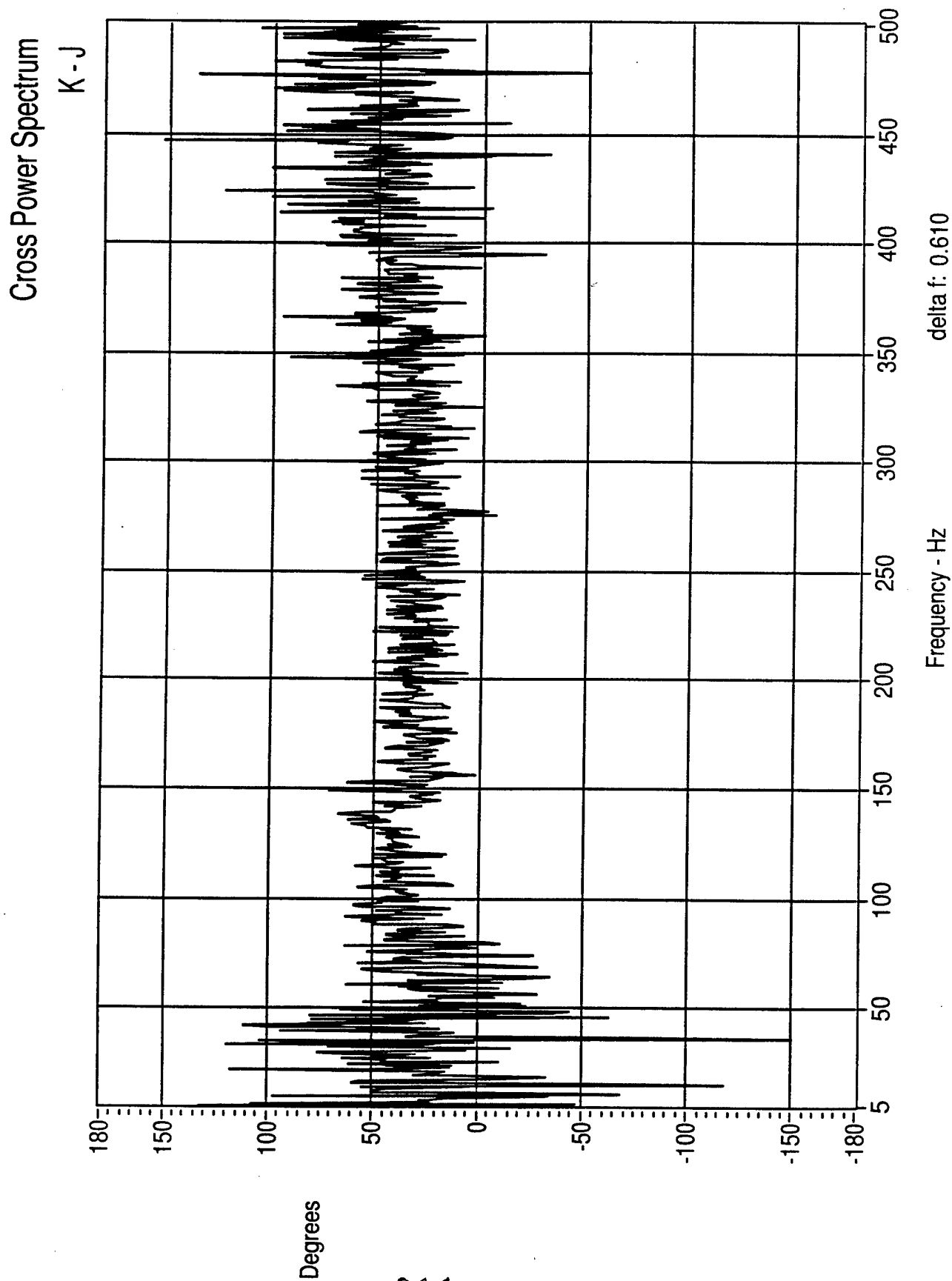
K-J



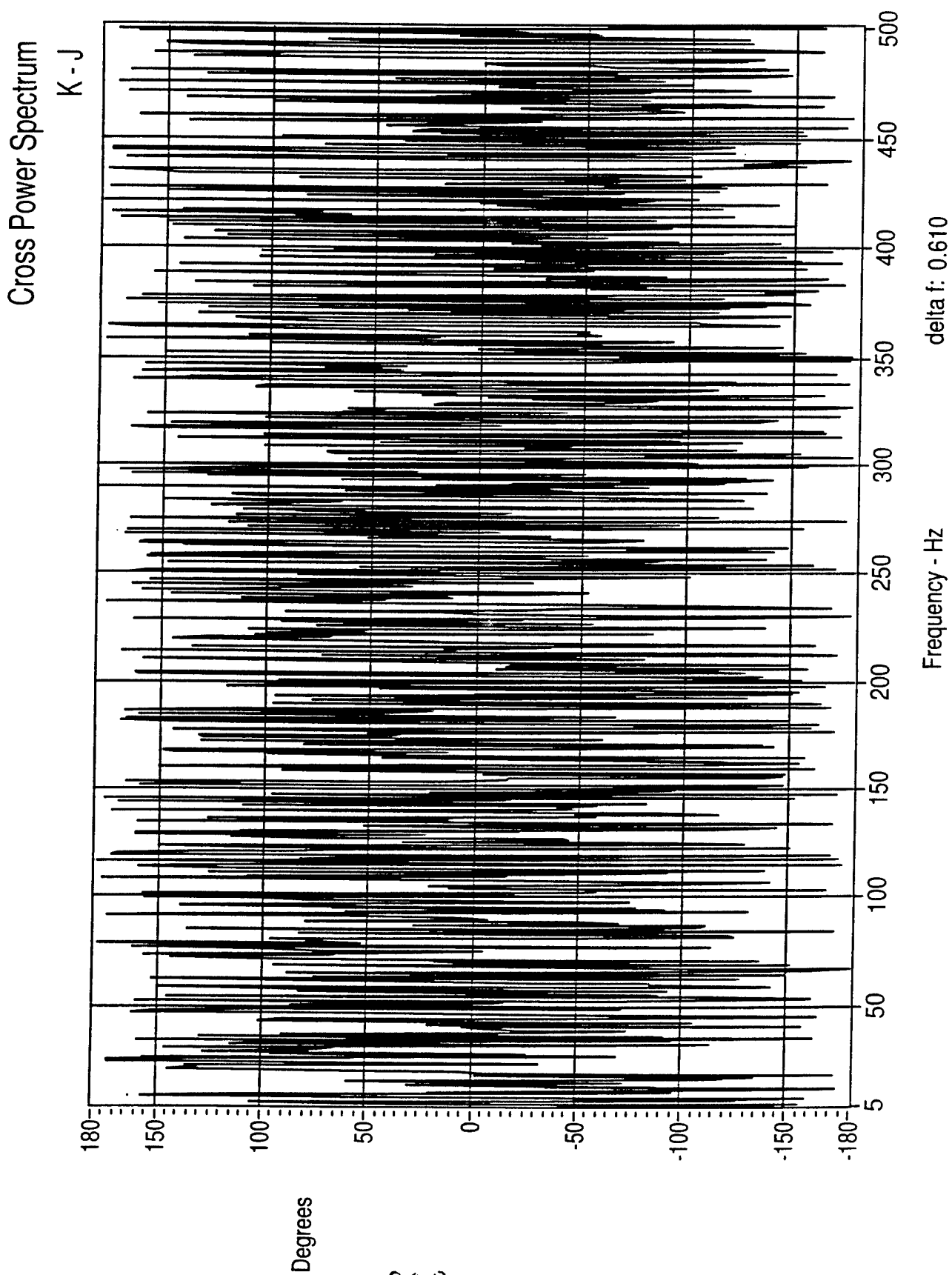
F-15 TPN\_2872:  $\alpha=24$   $\beta=-4$   $\text{bp}=0$



F-15 TPN\_2874: alpha=32 beta=-4 bp=0

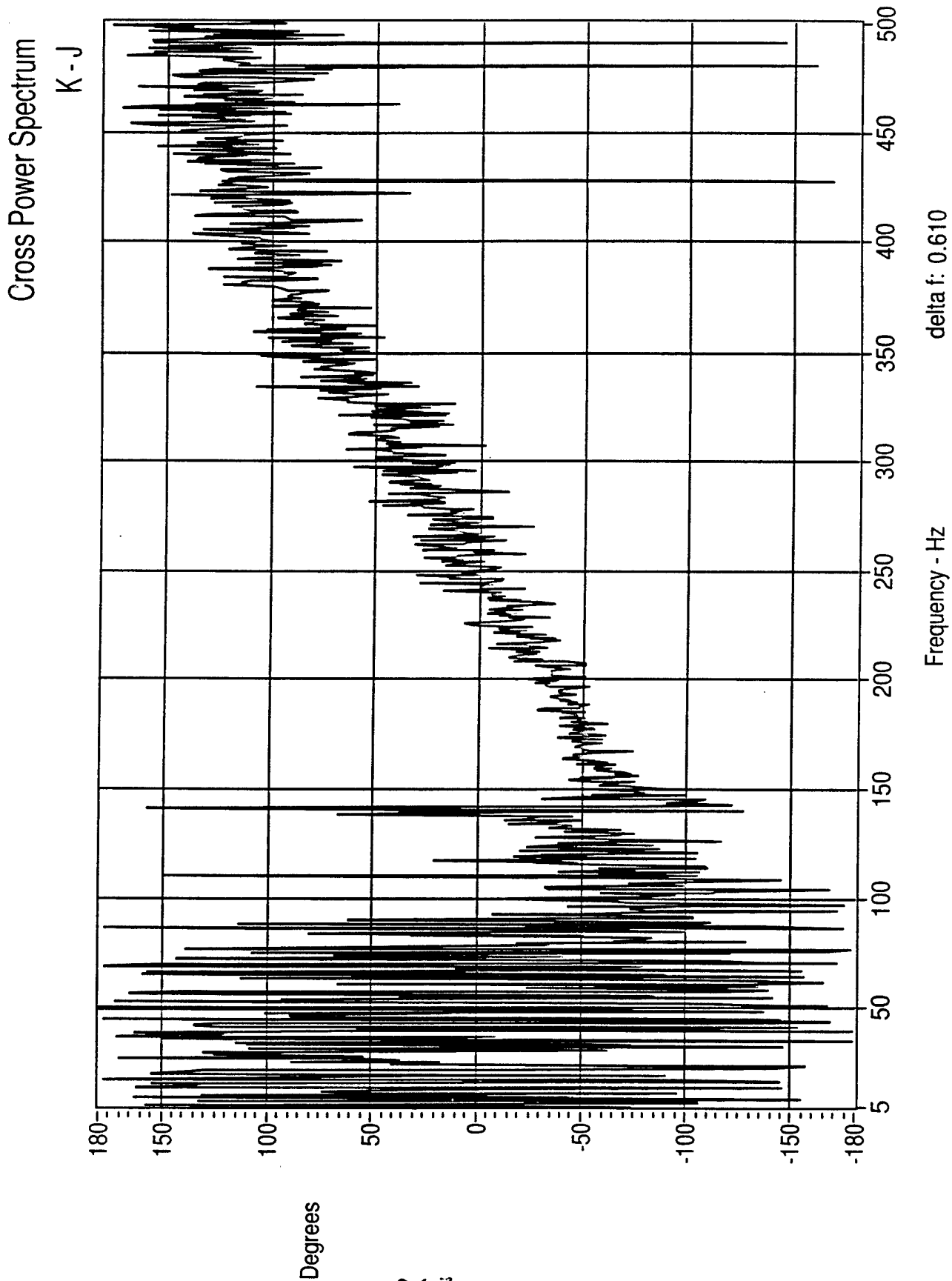


F-15 TPN\_3351: alpha=8 beta=4 bp=45

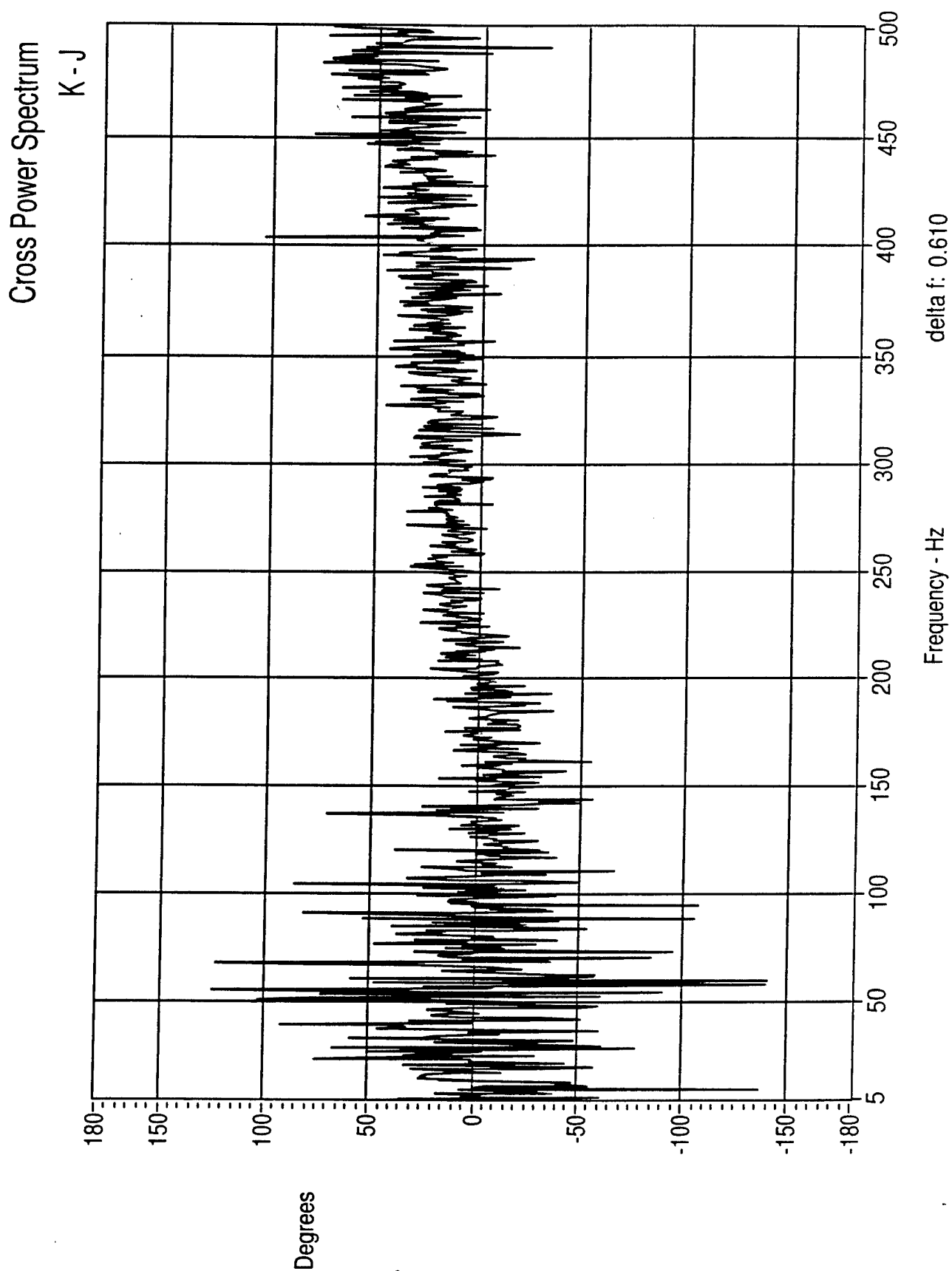




F-15 TPN\_3357: alpha=20 beta=4 bp=45



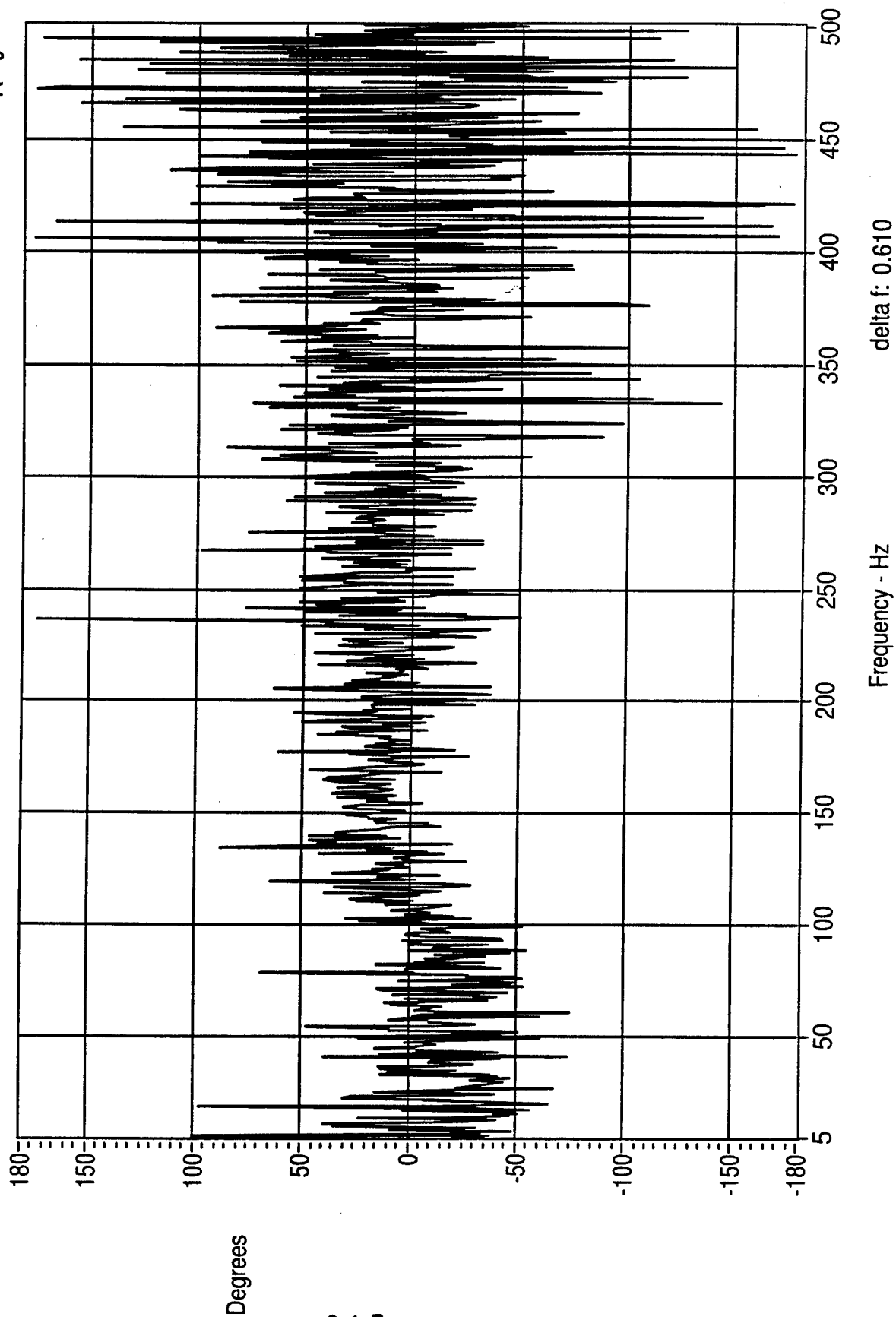
F-15 TPN\_3359: alpha=24 beta=4 bp=45



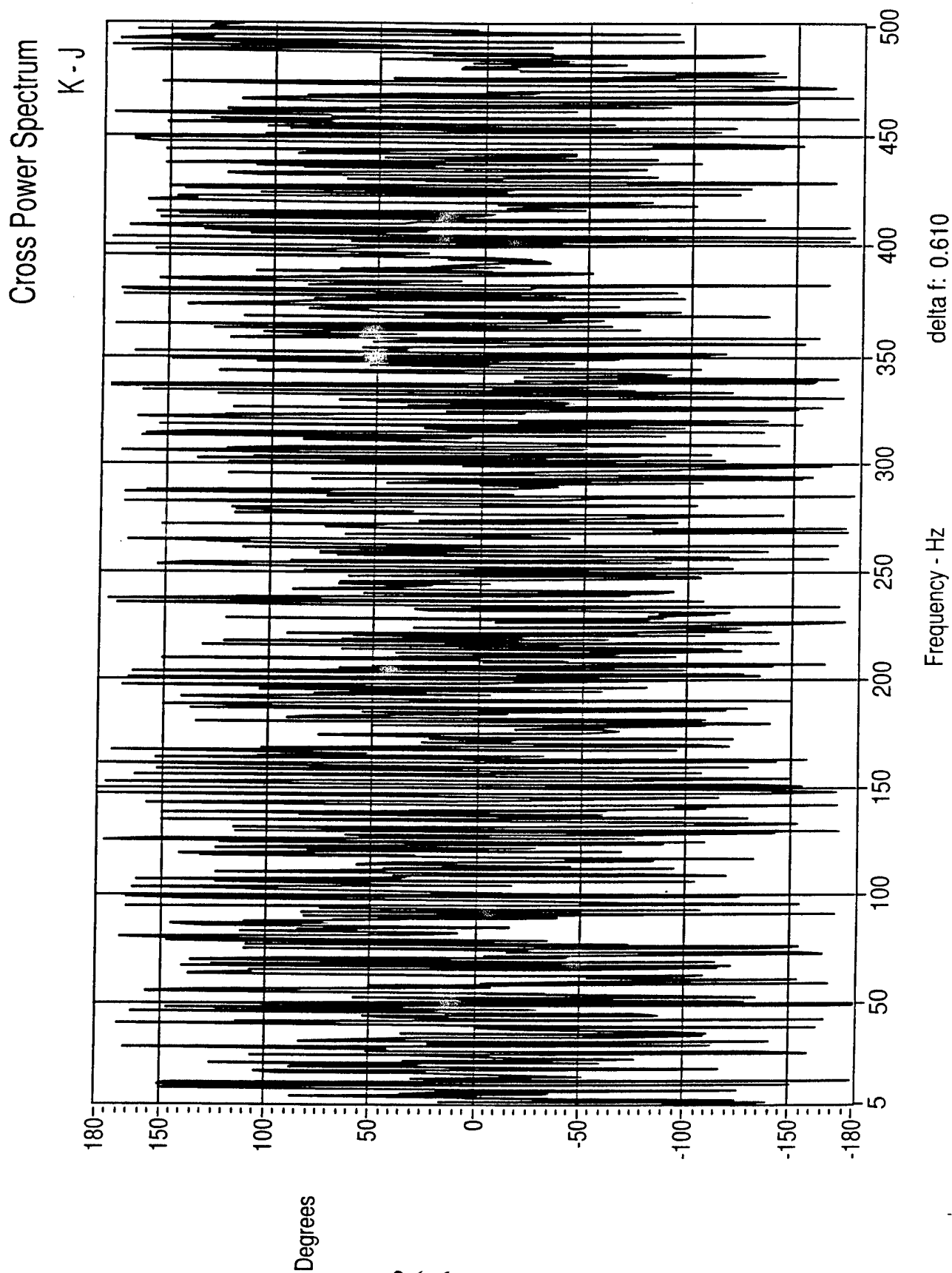
F-15 TPN\_3361: alpha=32 beta=4 bp=45

# Cross Power Spectrum

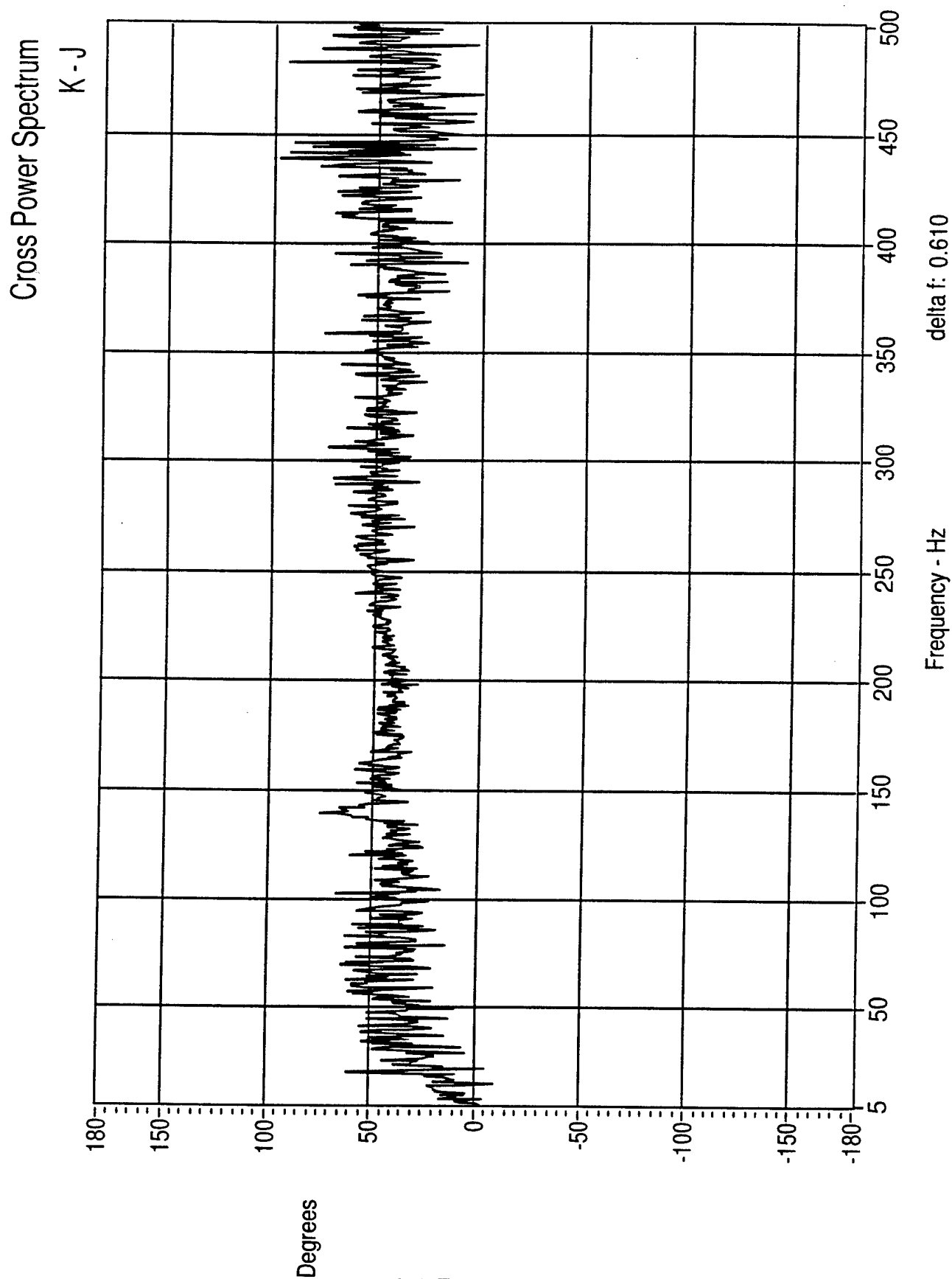
K - J



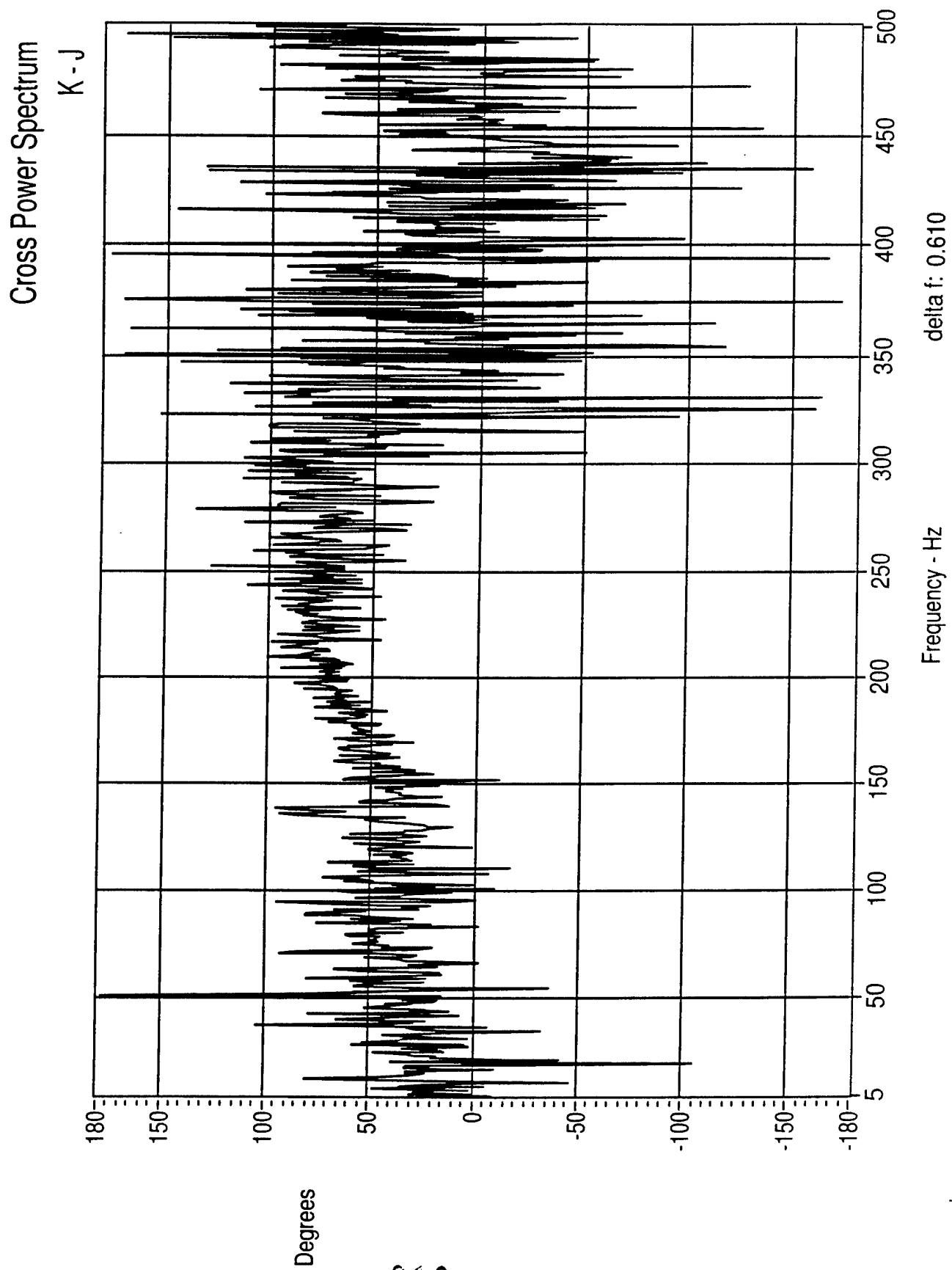
F-15 TPN\_3333:  $\alpha=8$   $\beta=0$   $\text{bp}=45$



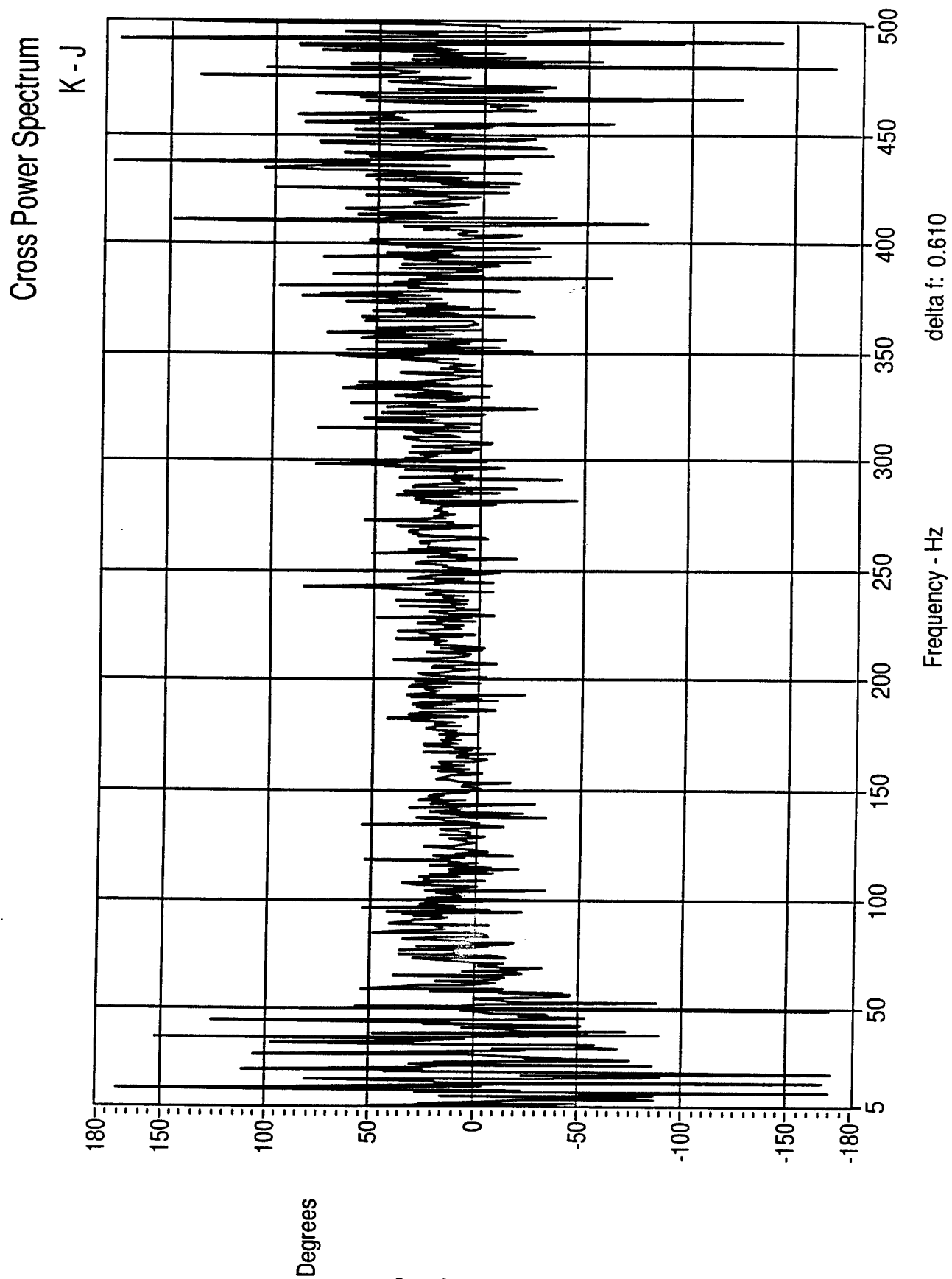
F-15 TPN\_3339: alpha=20 beta=0 bp=45



F-15 TPN\_3341: alpha=24 beta=0 bp=45



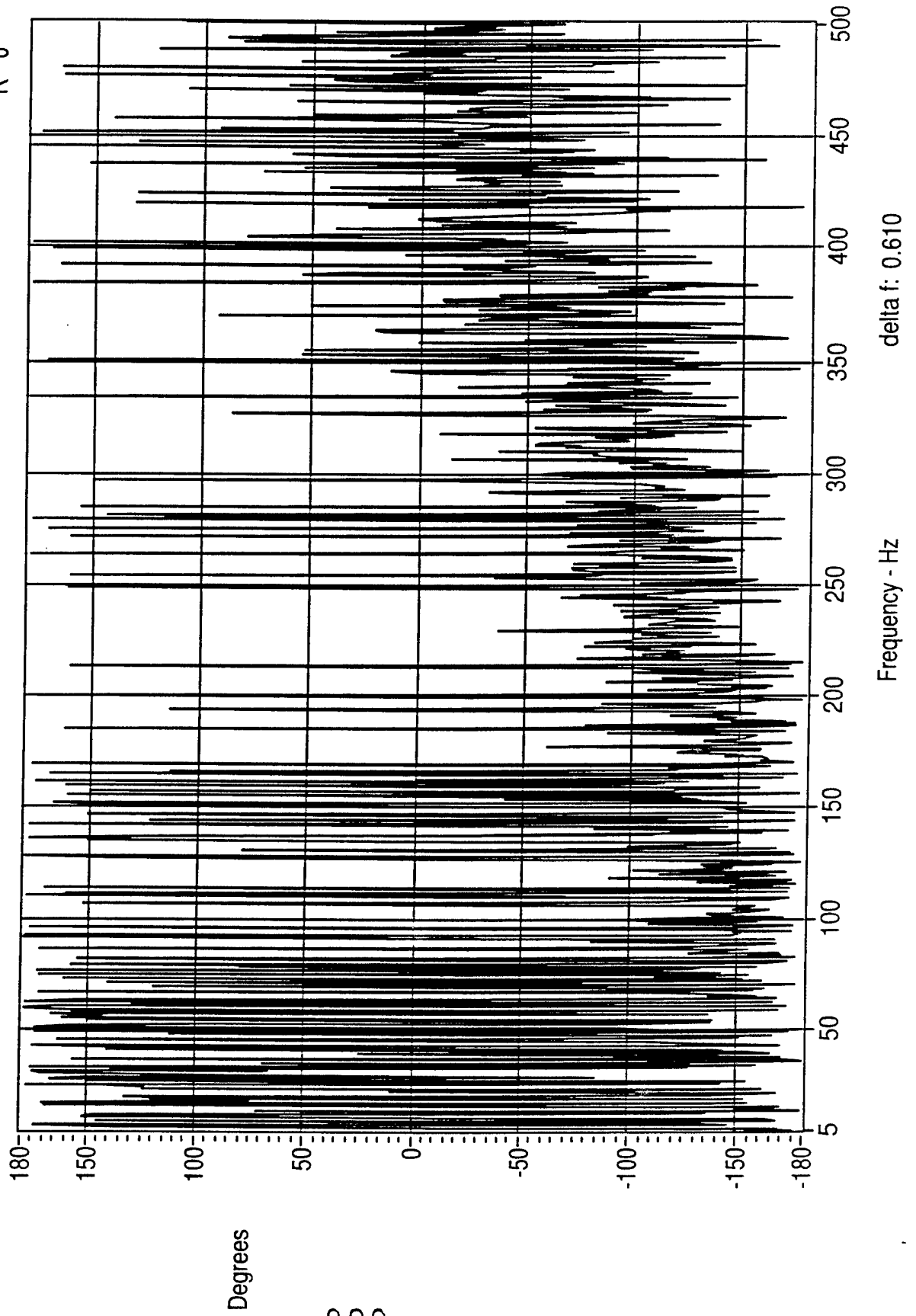
F-15 TPN\_3343: alpha=32 beta=0 bp=45



F-15 TPN\_3369: alpha=8 beta=-4 bp=45

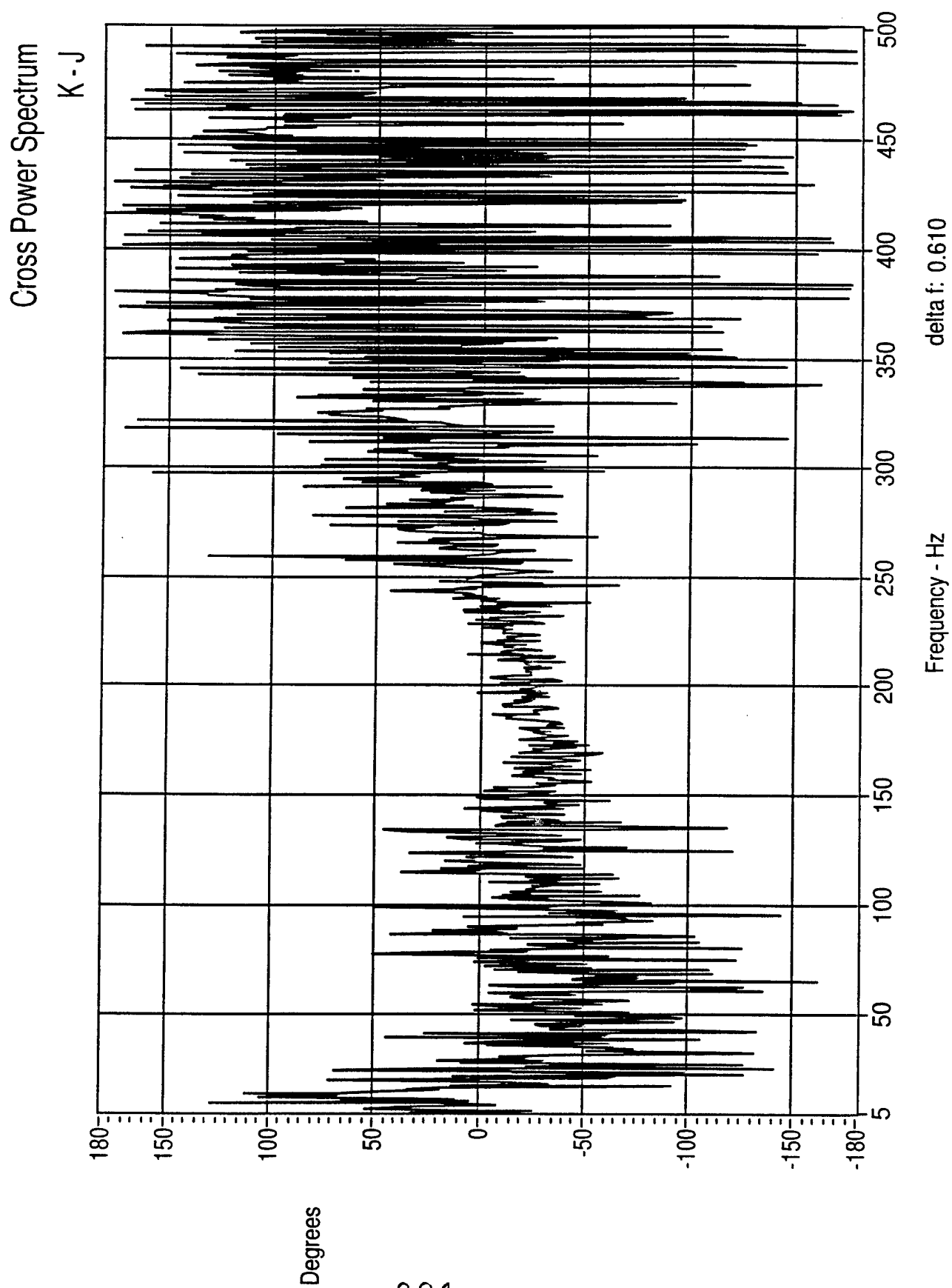
# Cross Power Spectrum

K - J

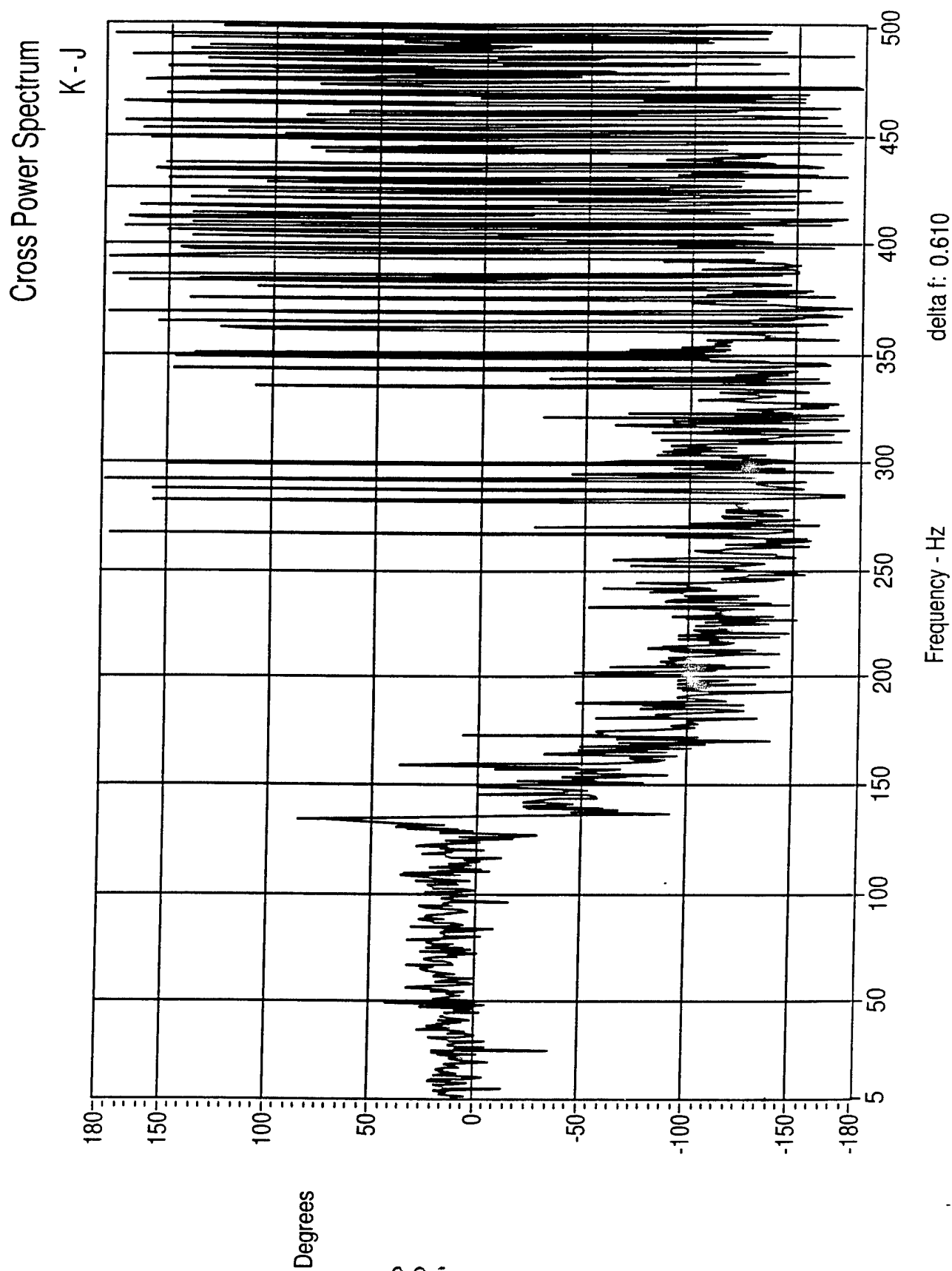




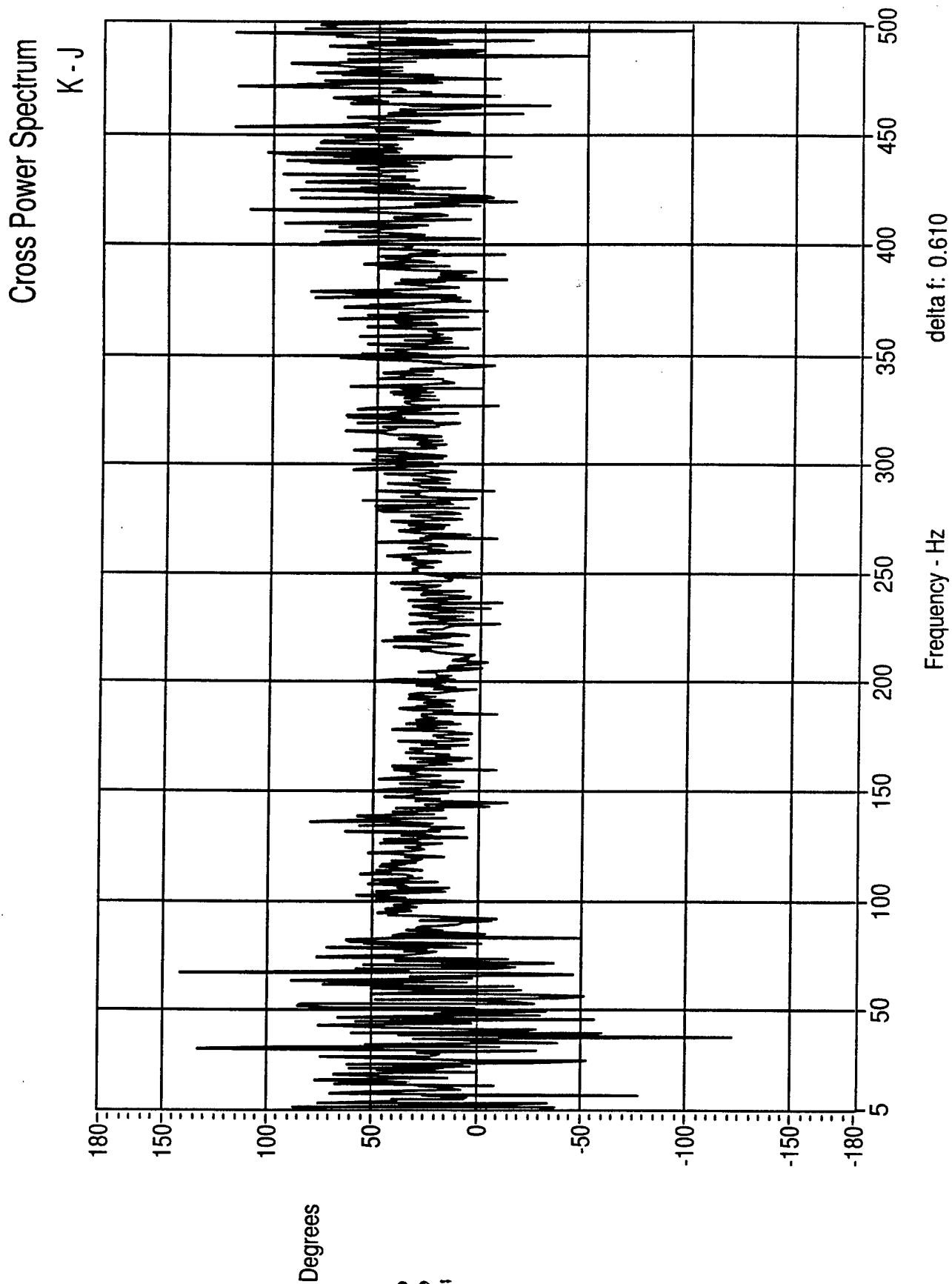
F-15 TPN\_3375: alpha=20 beta=-4 bp=45



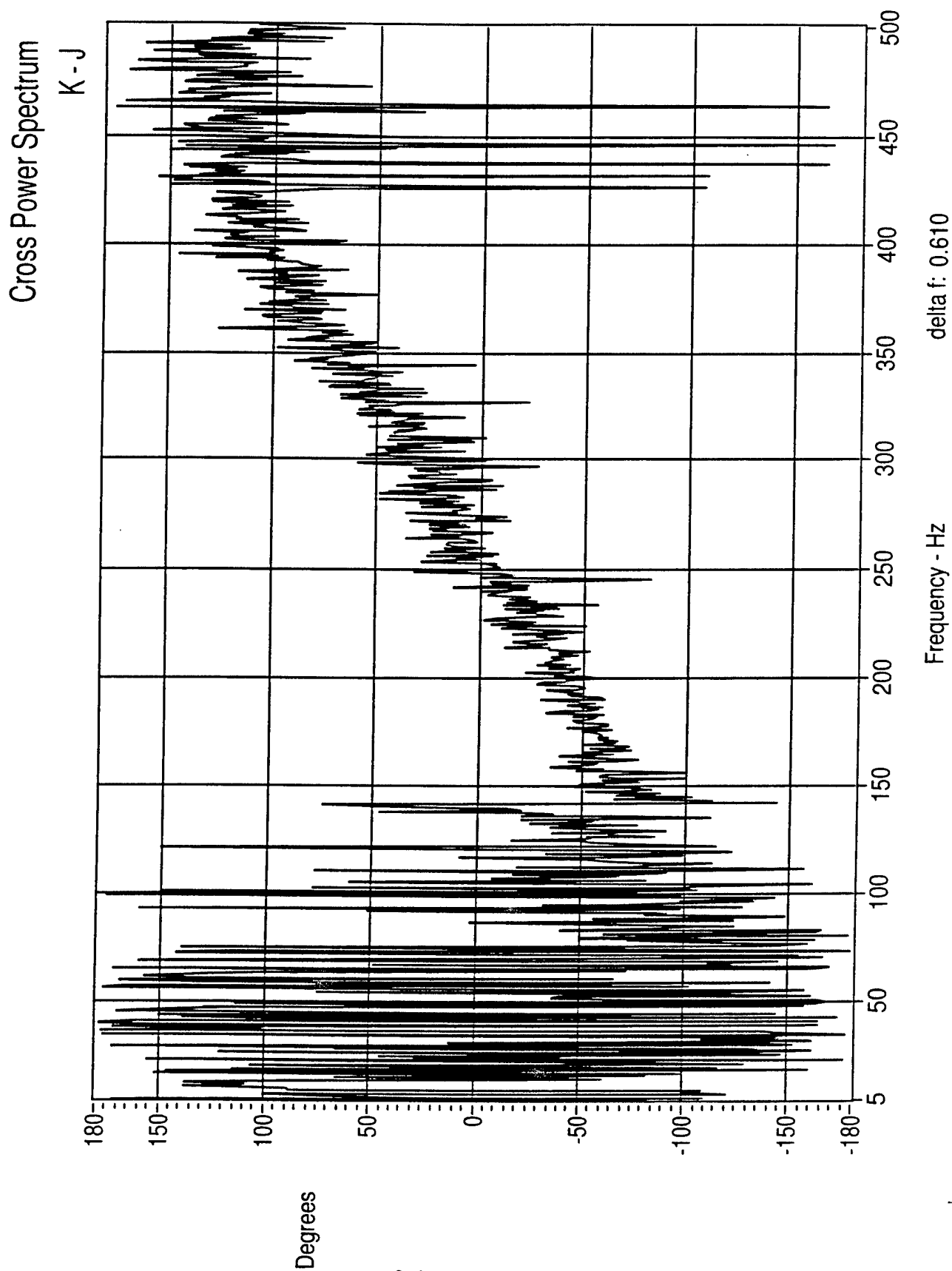
F-15 TPN\_3377: alpha=24 beta=-4 bp=45



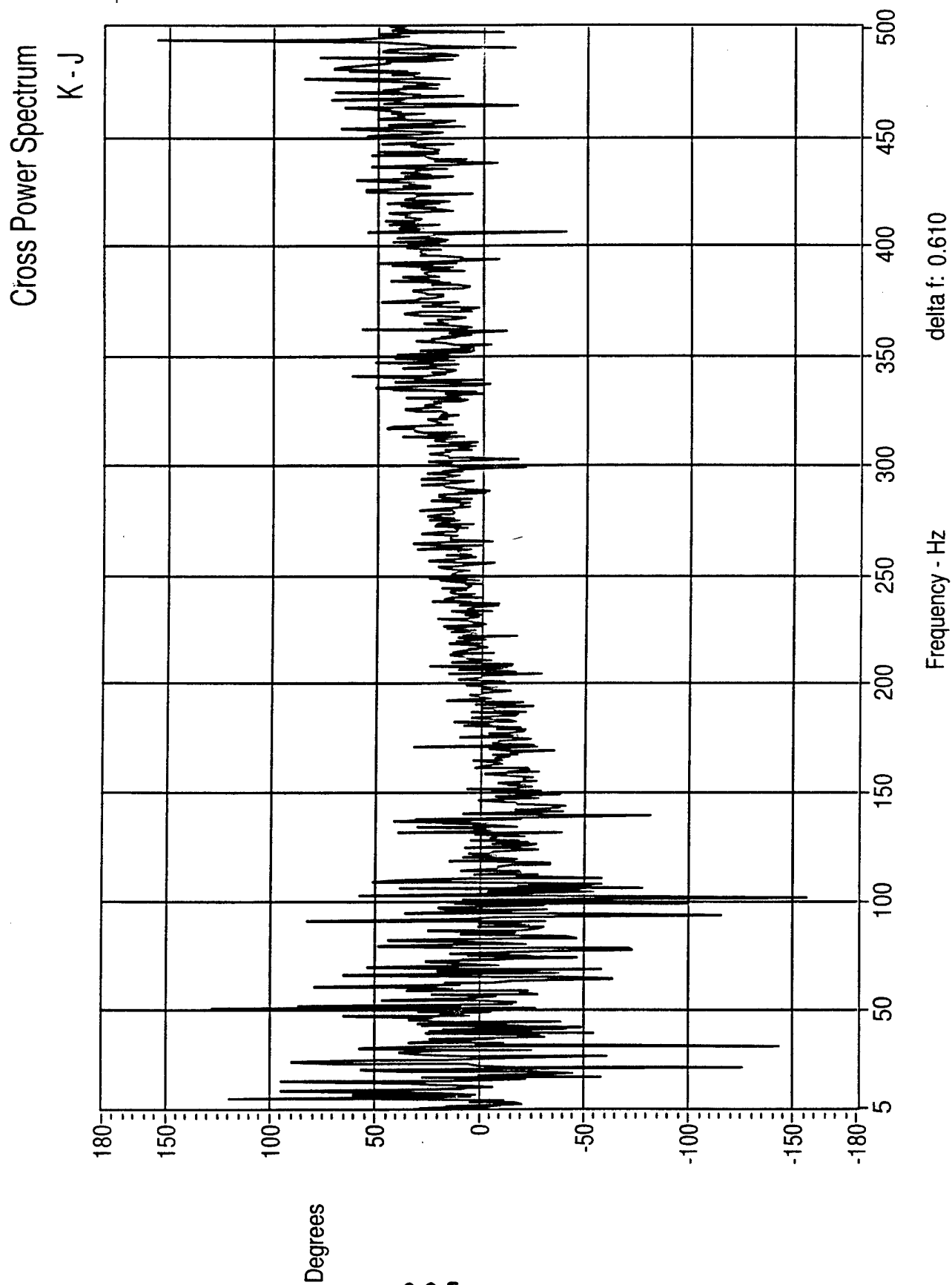
F-15 TPN\_3379: alpha=32 beta=-4 bp=45



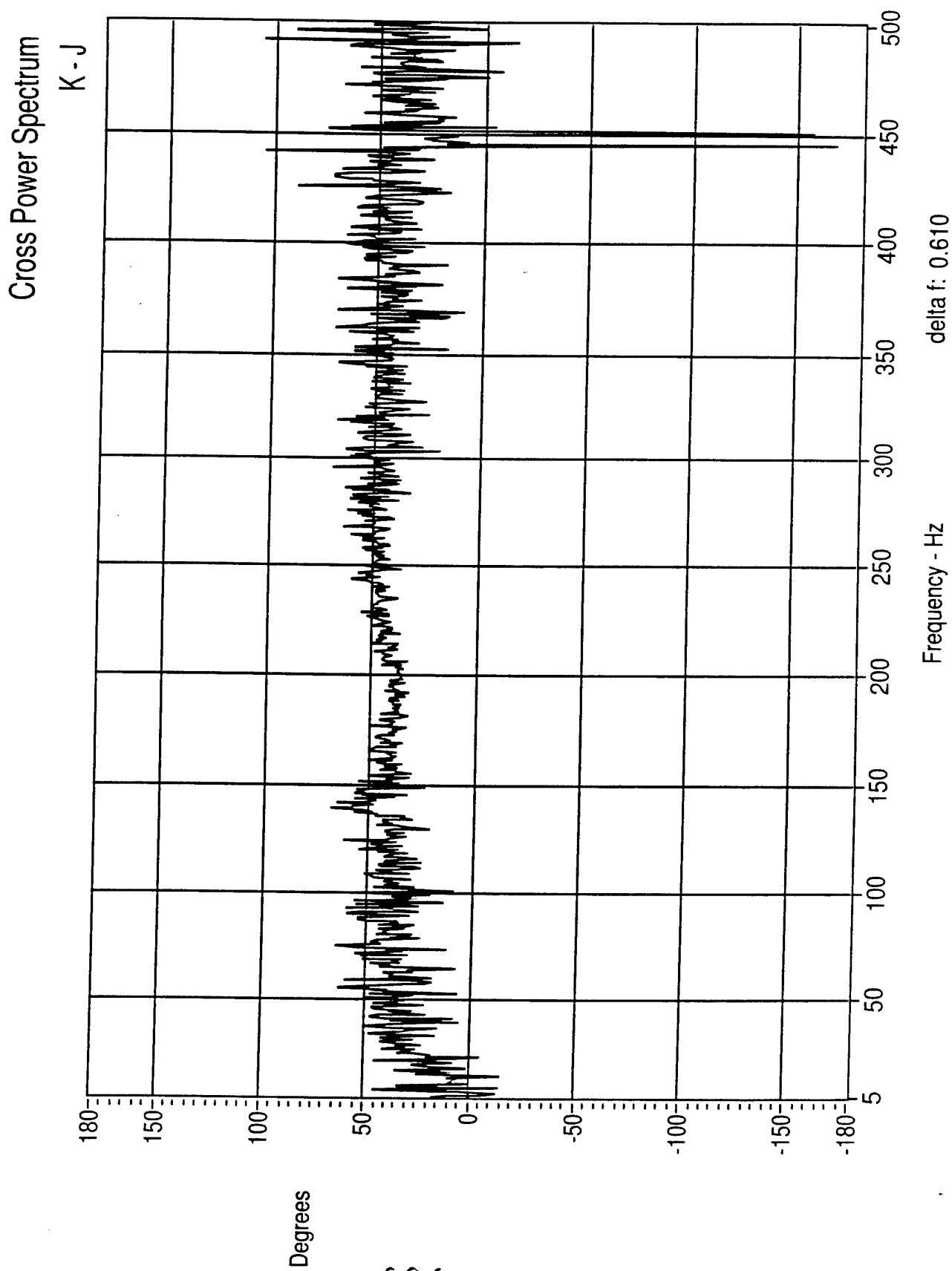
F-15 TPN\_3046: alpha=20 beta=4 bp=65



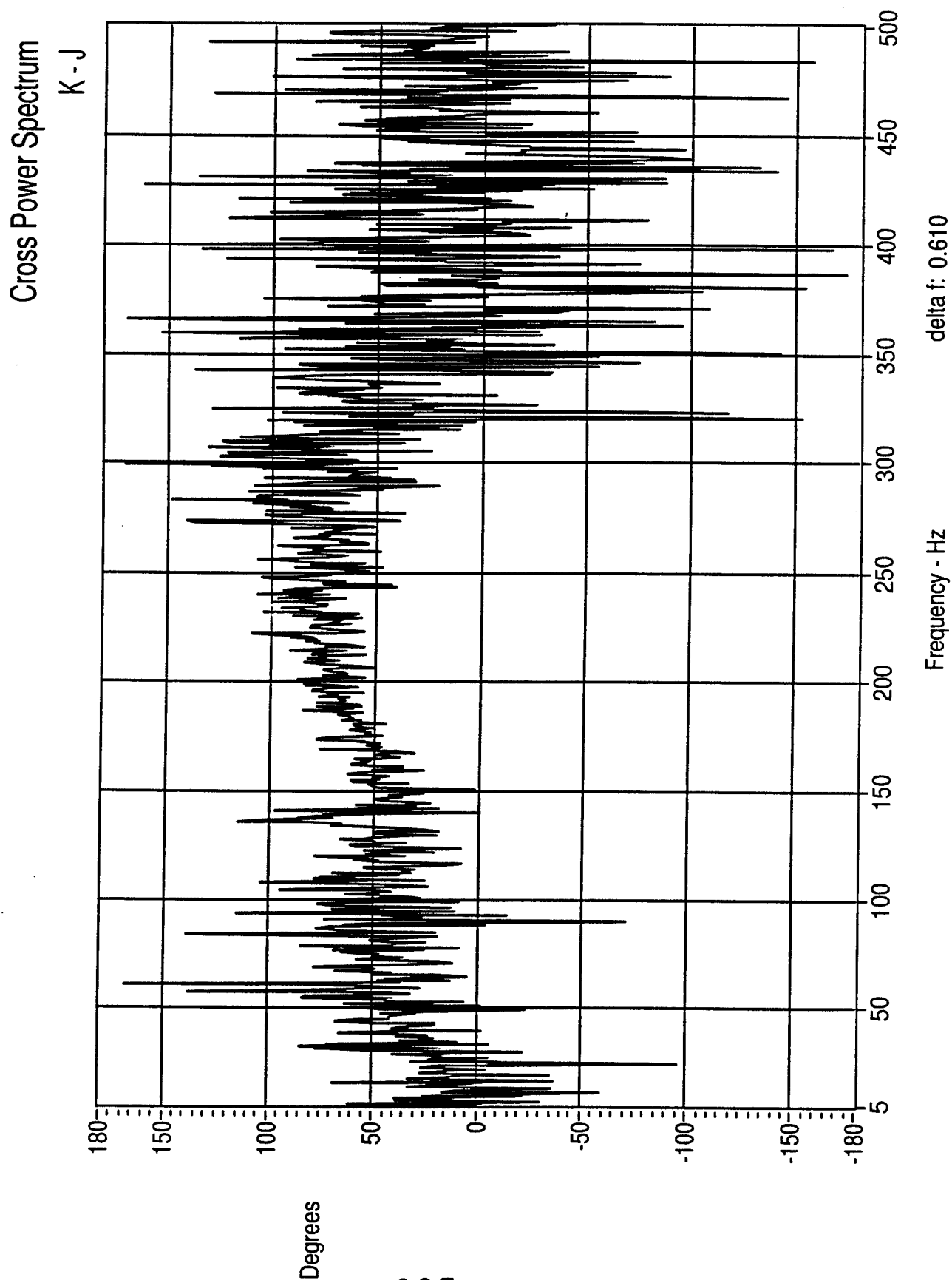
F-15 TPN\_3048: alpha=24 beta=4 bp=65



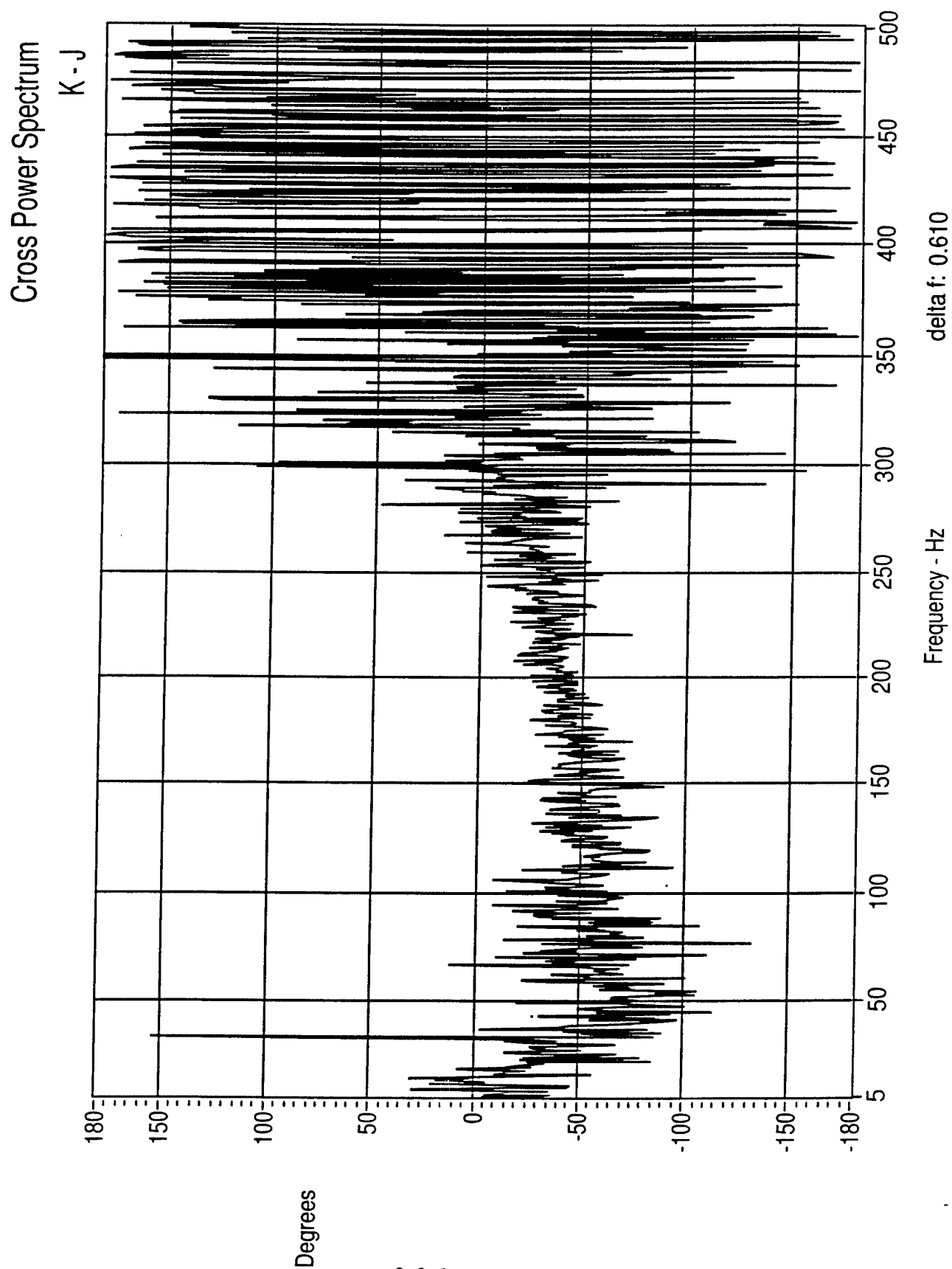
F-15 TPN\_3040: alpha=20 beta=0 bp=65



F-15 TPN\_3042: alpha=24 beta=0 bp=65

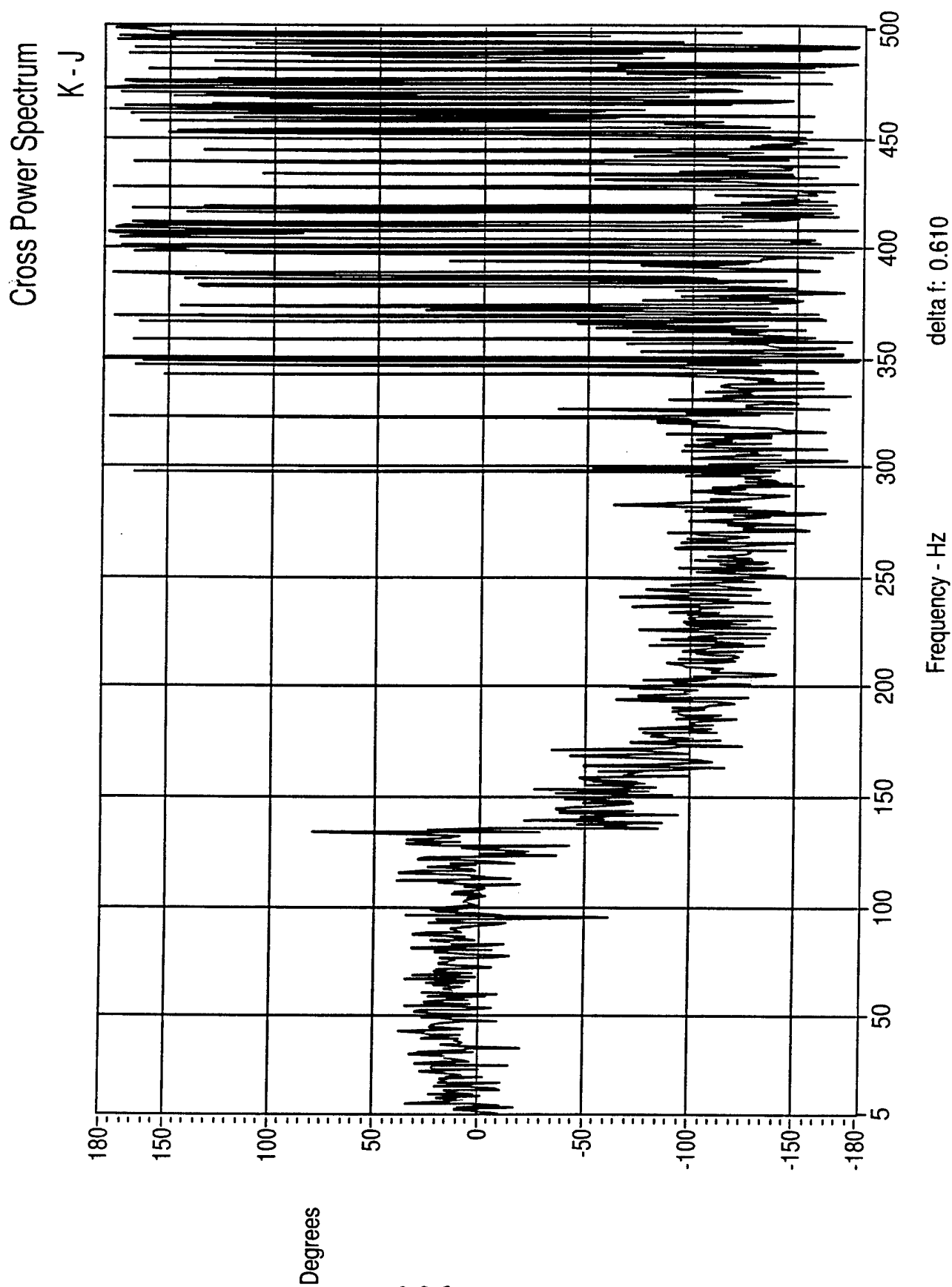


F-15 TPN\_3034: alpha=20 beta=-4 bp=65

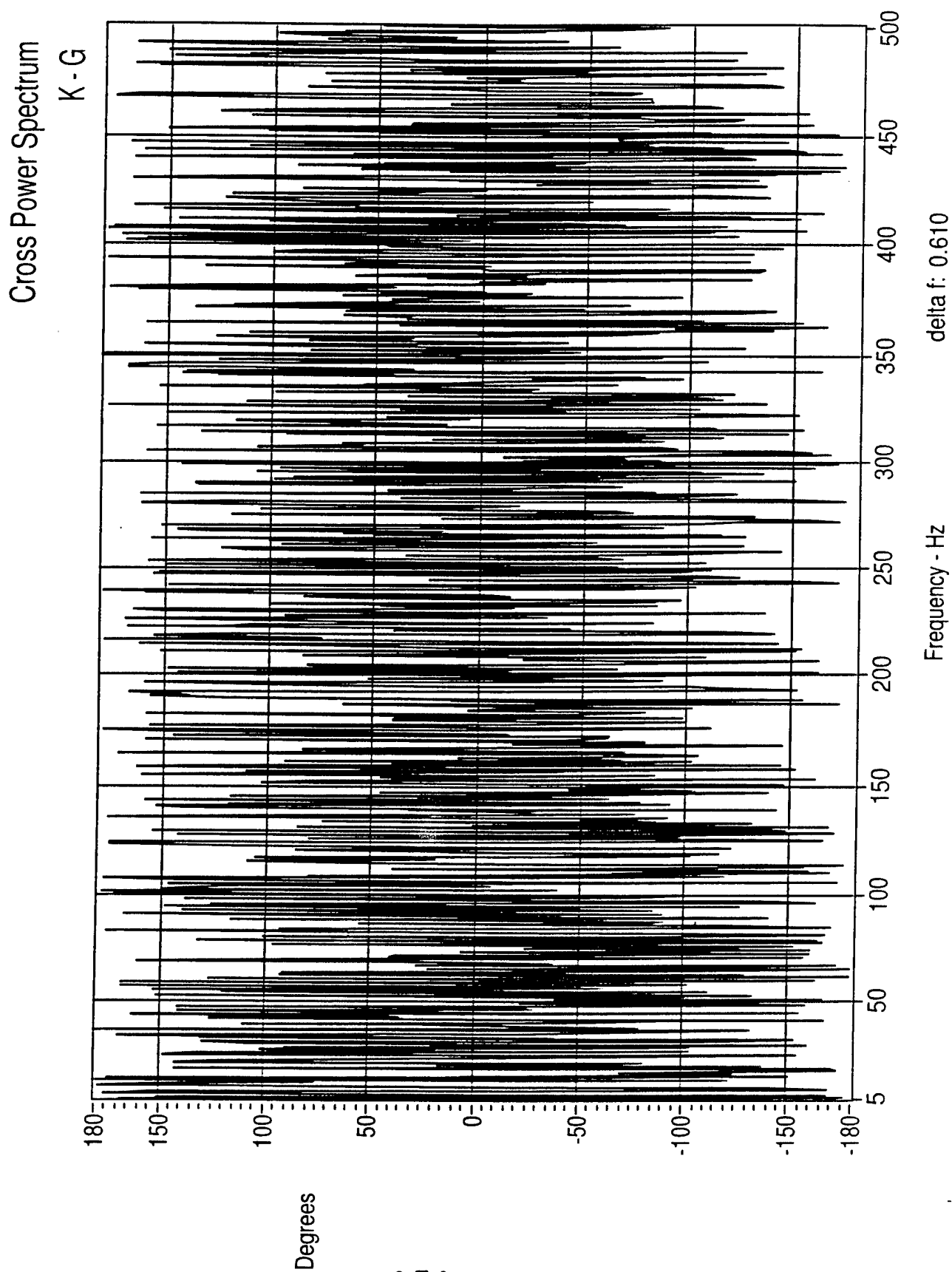




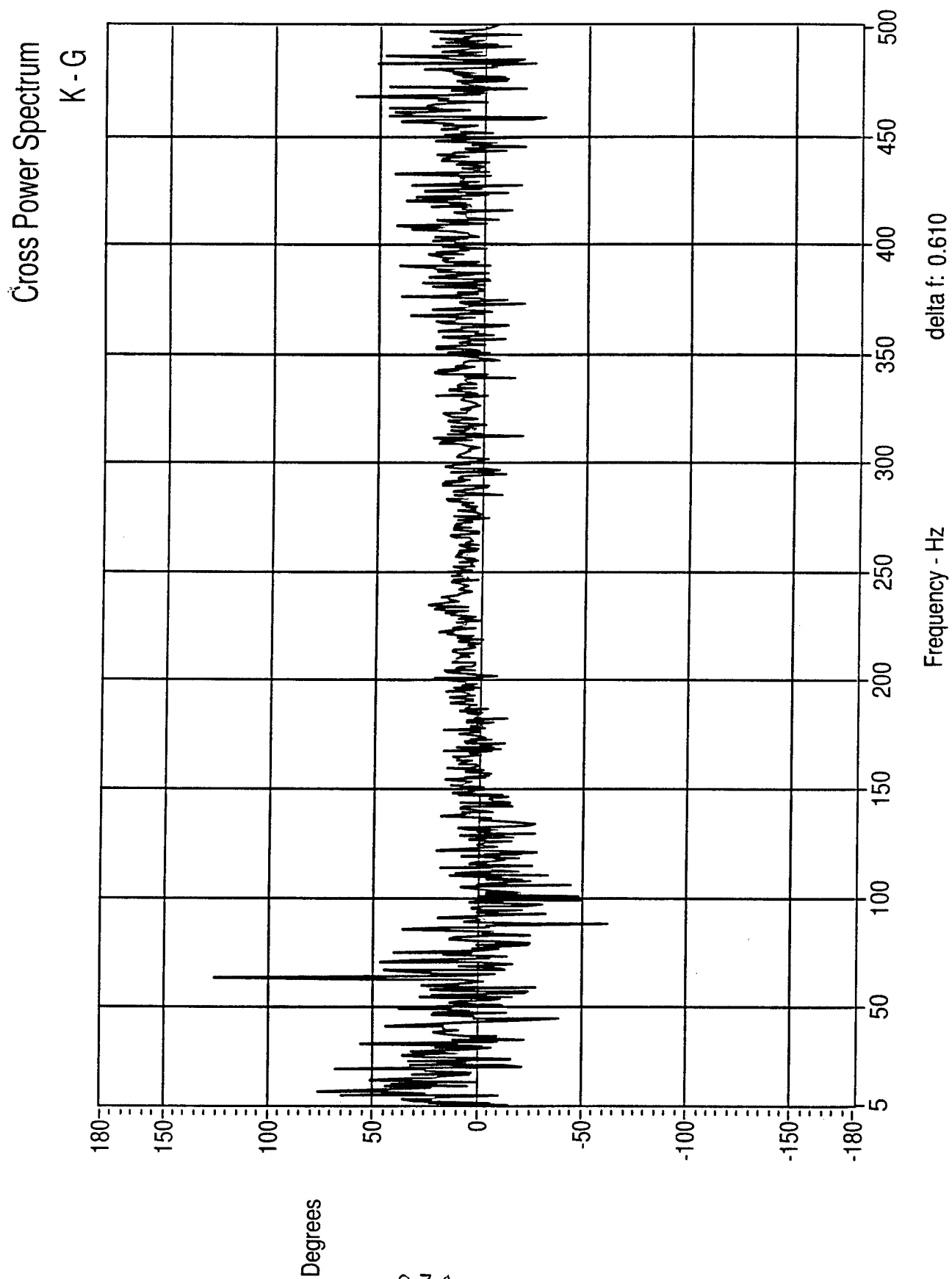
F-15 TPN\_3036: alpha=24 beta=-4 bp=65



F-15 TPN\_2918: alpha=8 beta=4 bp=0



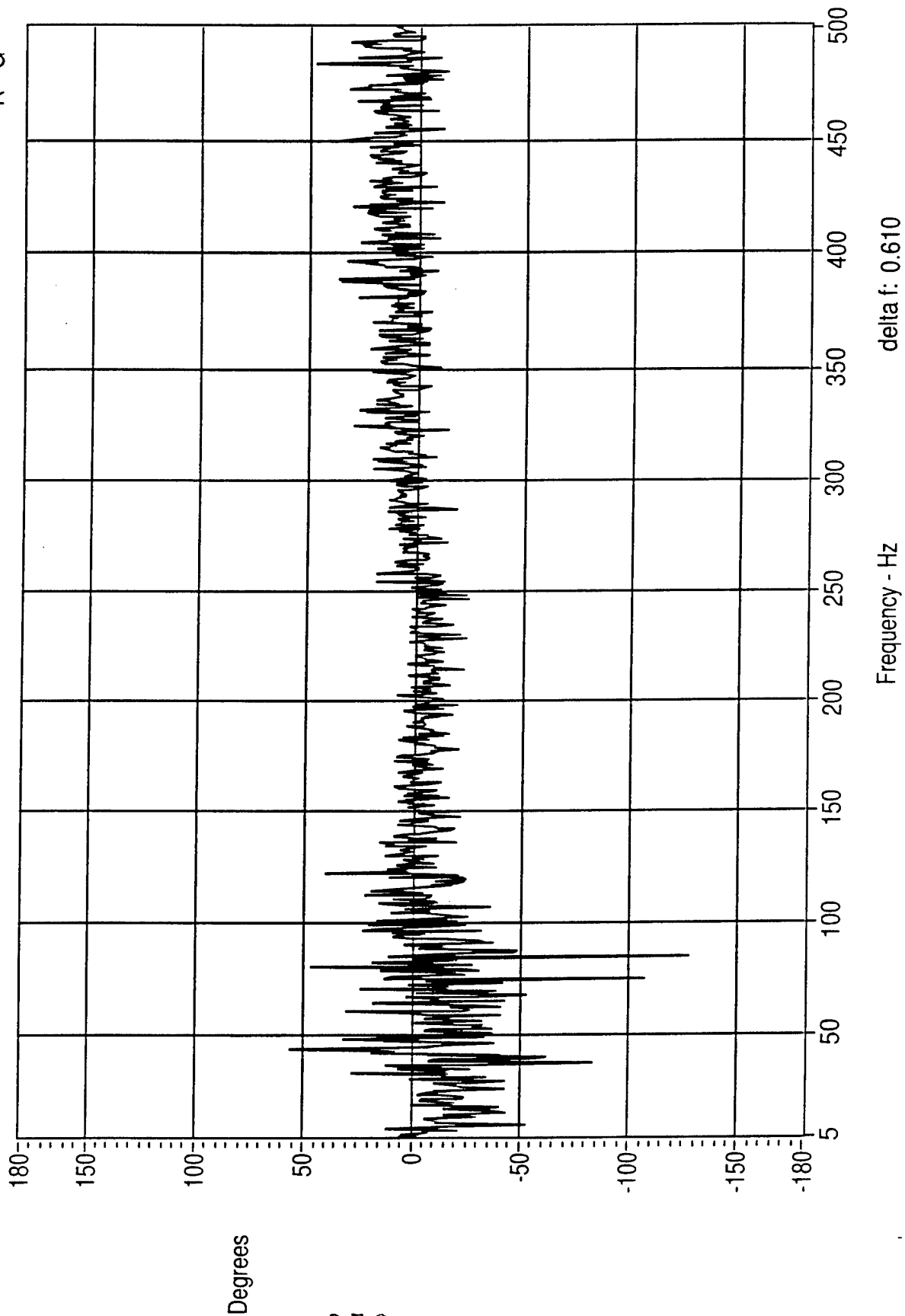
F-15 TPN\_2924: alpha=20 beta=4 bp=0



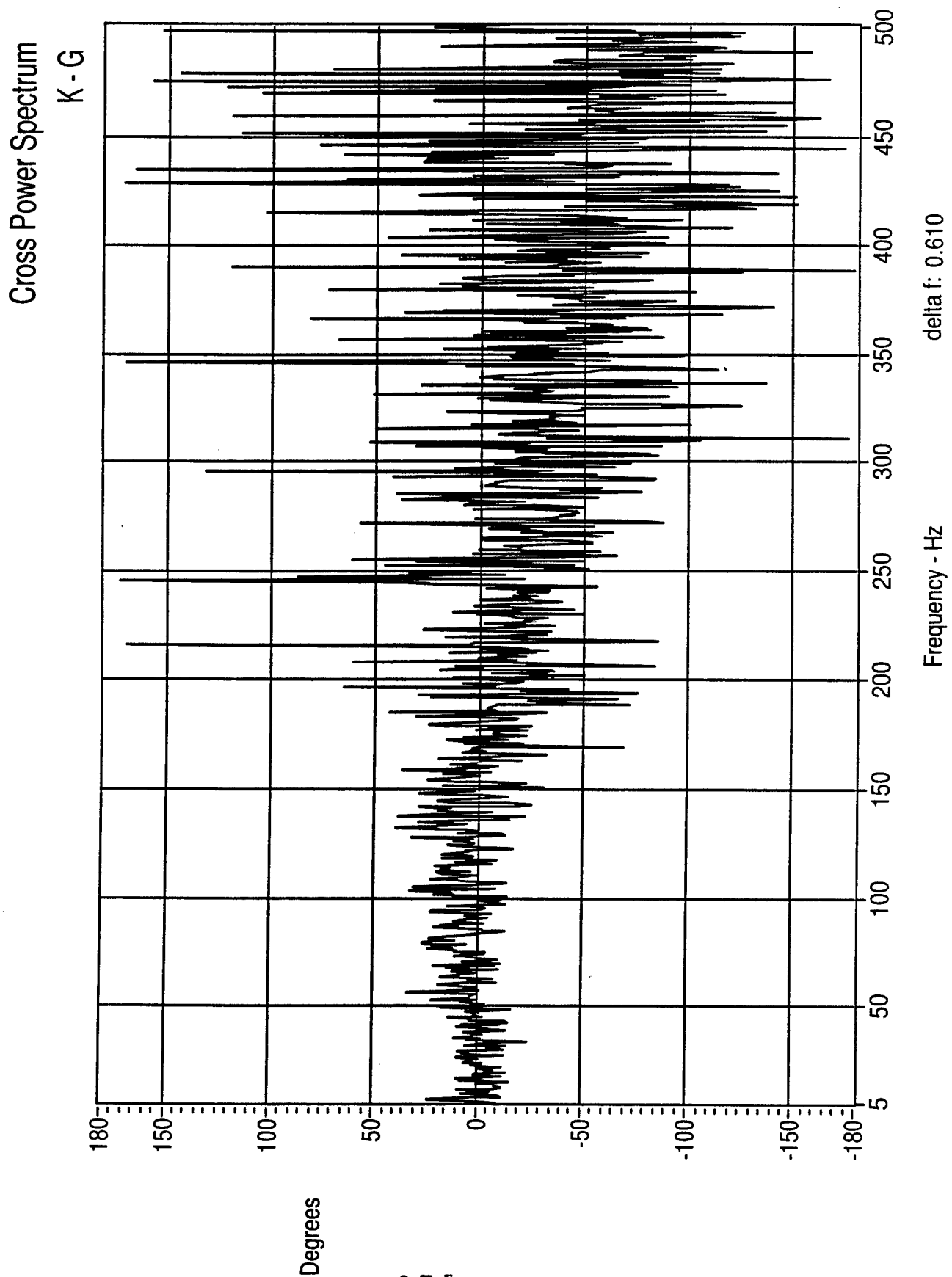
F-15 TPN\_2926: alpha=24 beta=4 bp=0

# Cross Power Spectrum

K - G



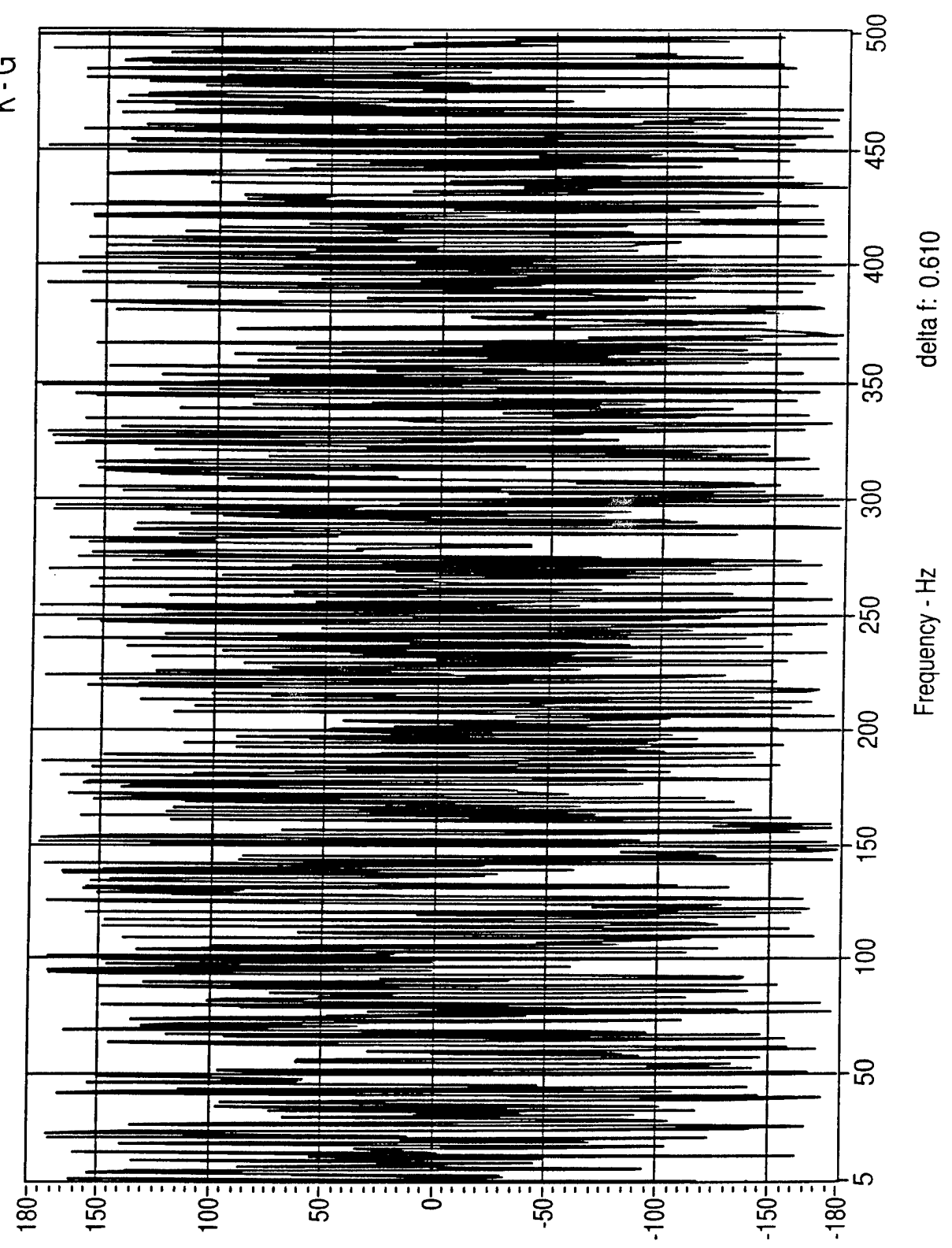
F-15 TPN\_2928: alpha=32 beta=4 bp=0



F-15 TPN\_2844: alpha=8 beta=0 bp=0

Cross Power Spectrum

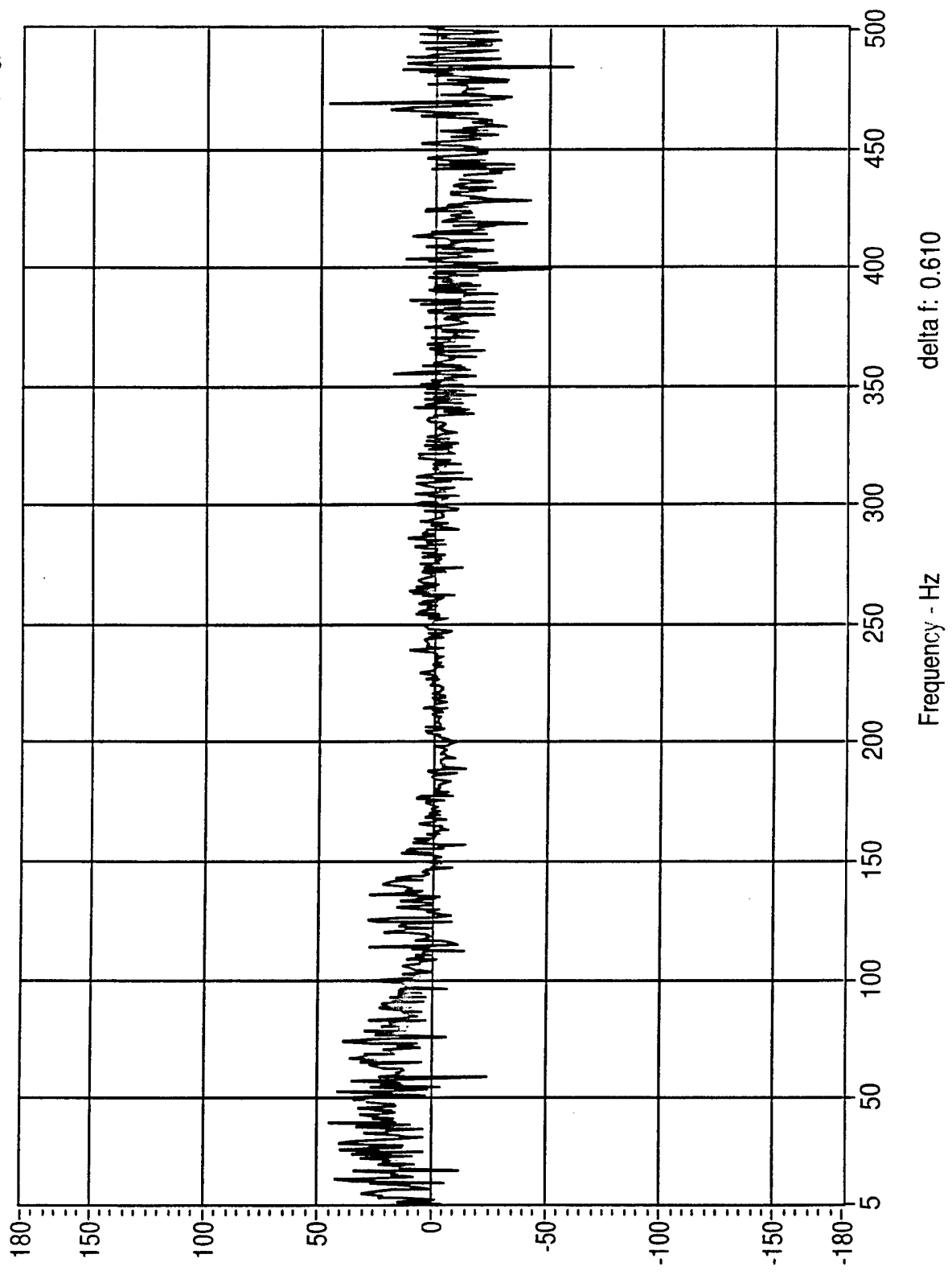
K - G



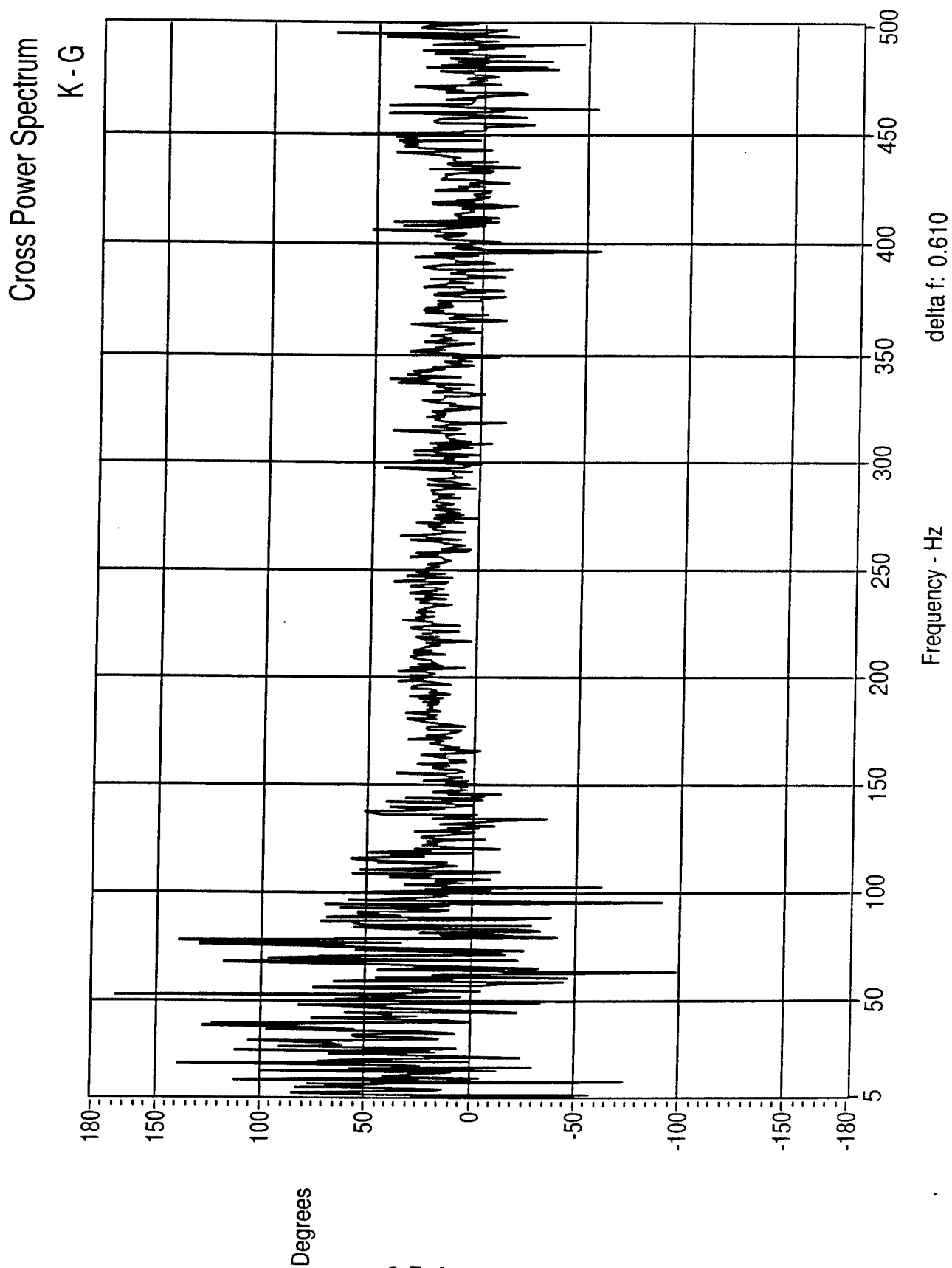
F-15 TPN\_2850: alpha=20 beta=0 bp=0

Cross Power Spectrum

K - G

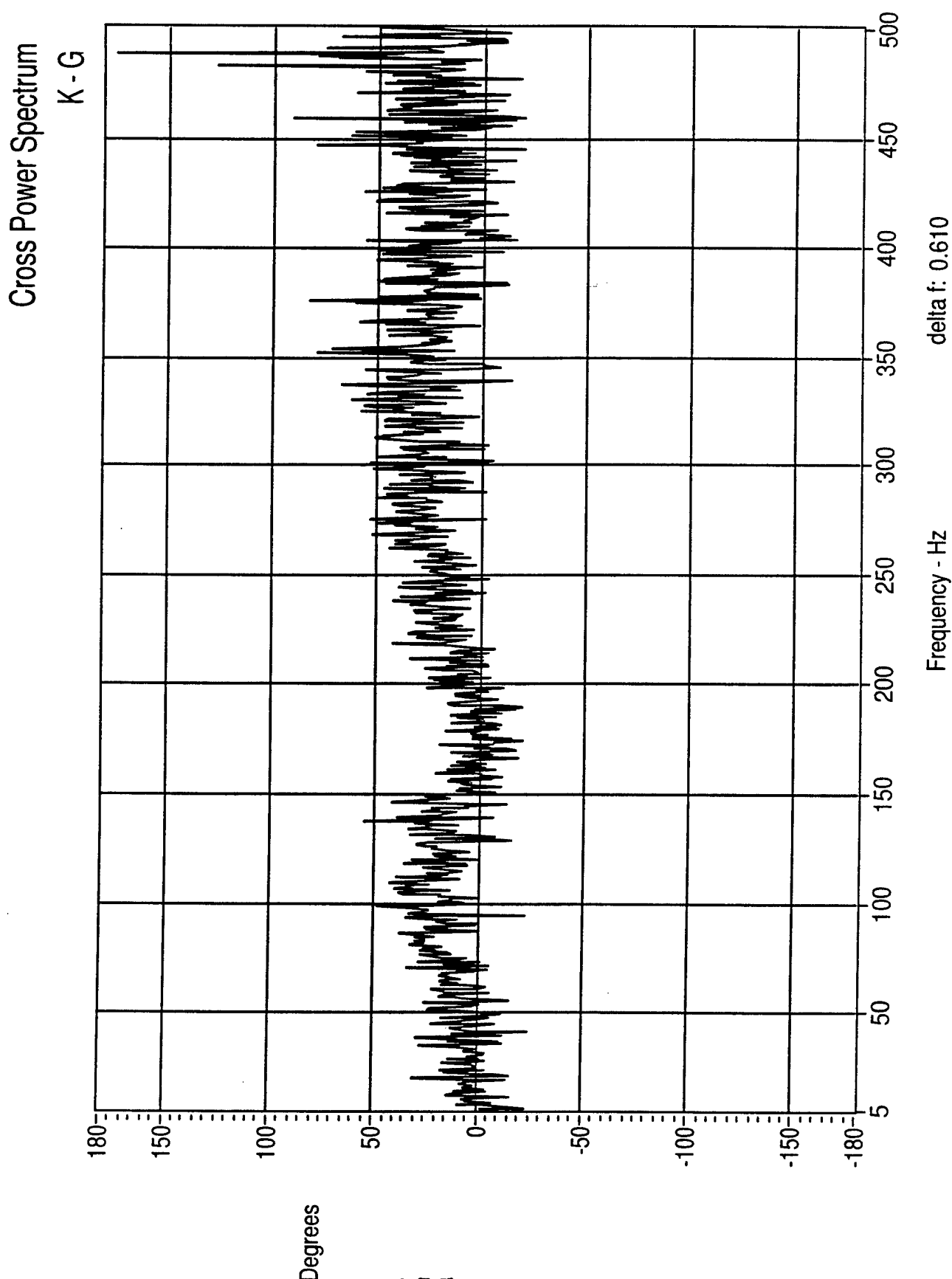


F-15 TPN\_2852: alpha=24 beta=0 bp=0

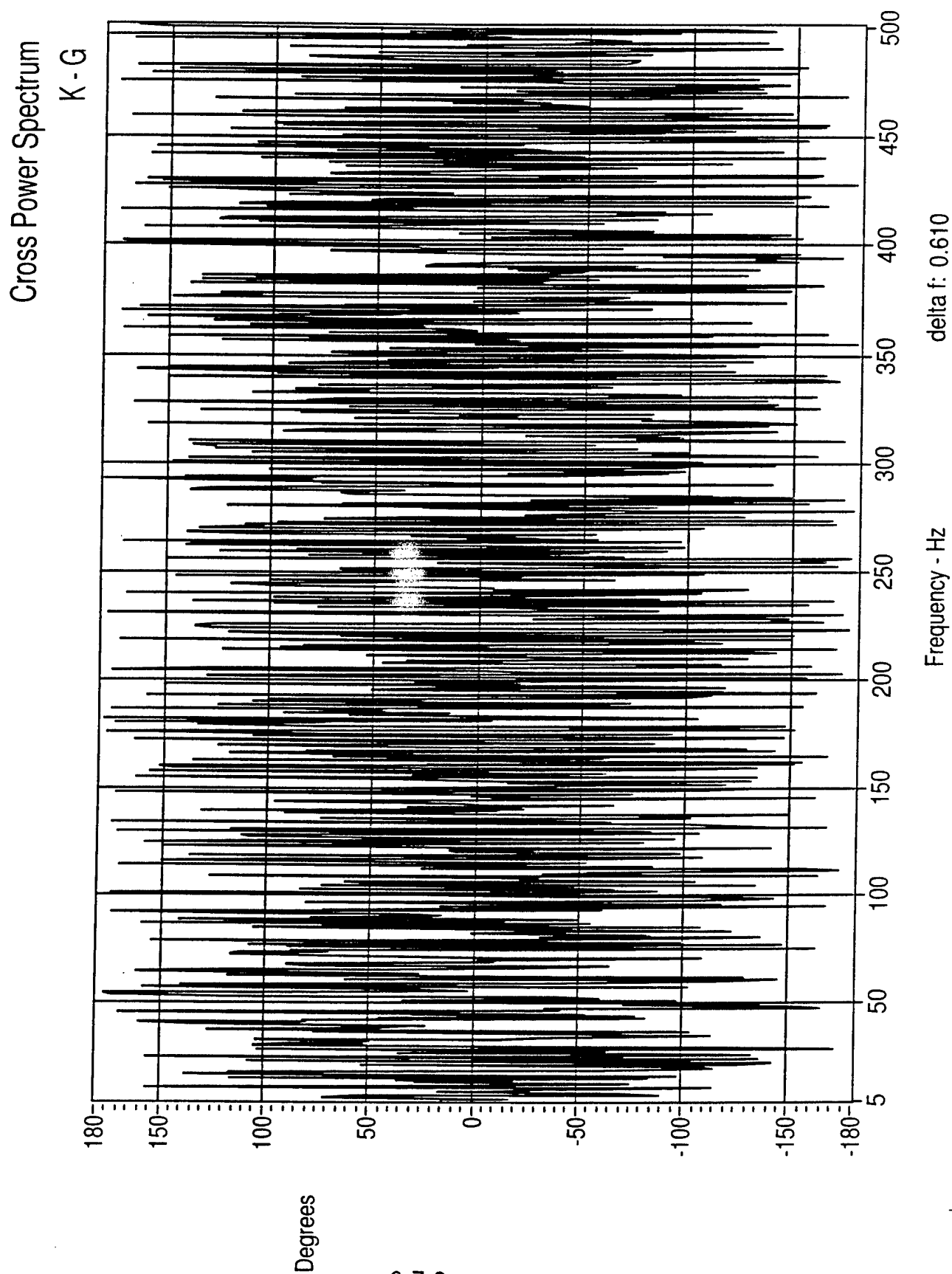




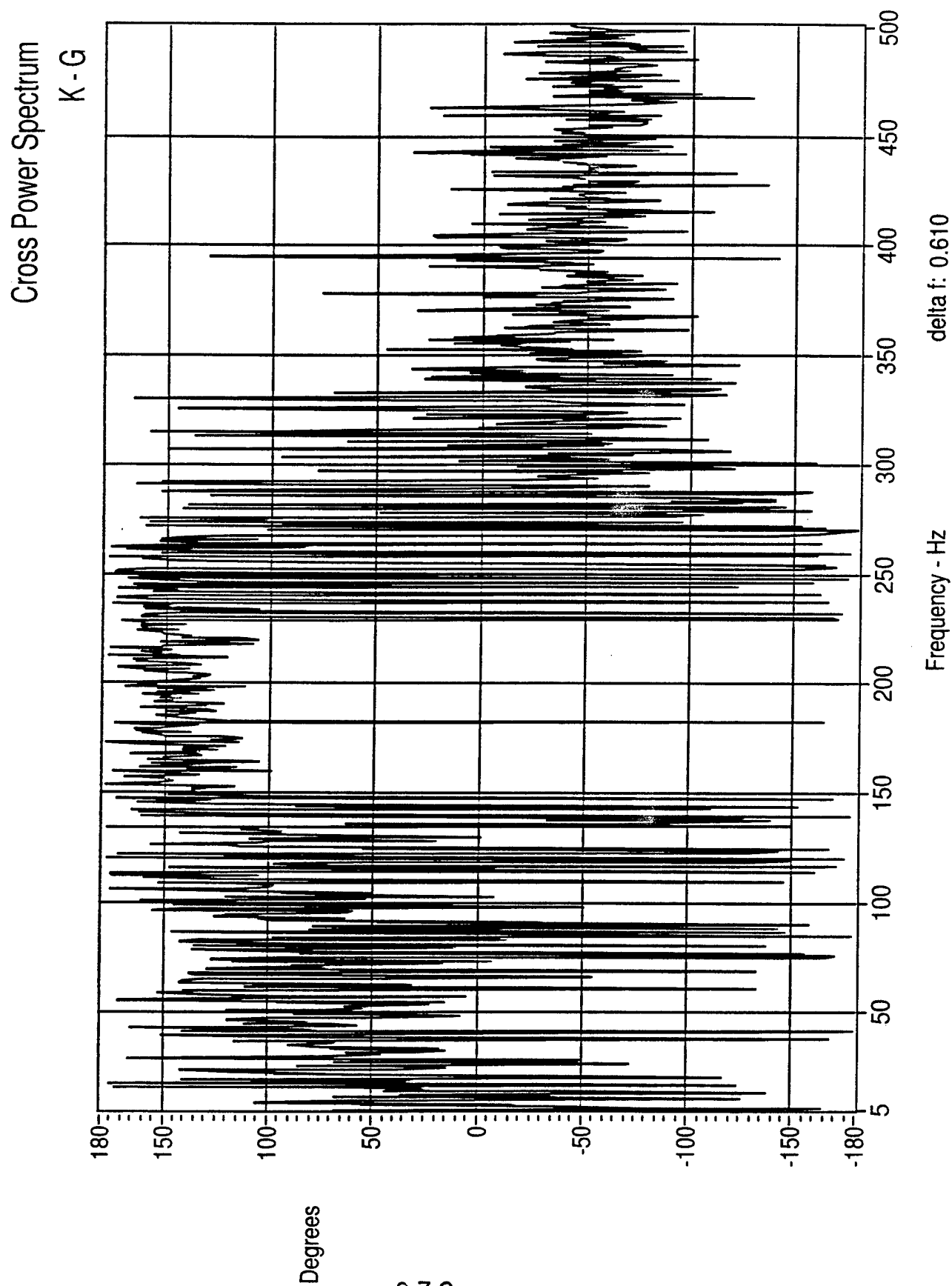
F-15 TPN\_2854: alpha=32 beta=0 bp=0



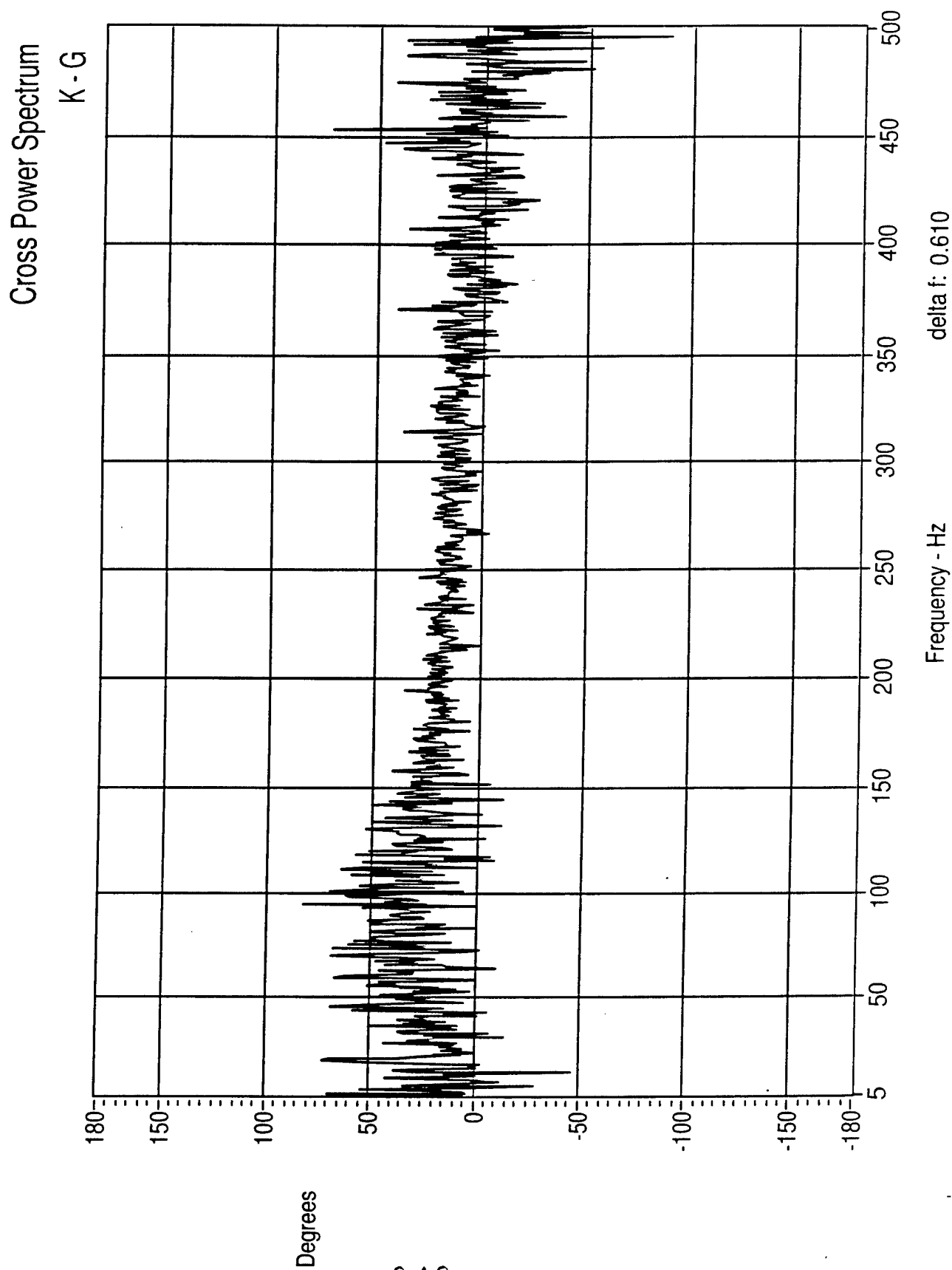
F-15 TPN\_2864: alpha=8 beta=-4 bp=0



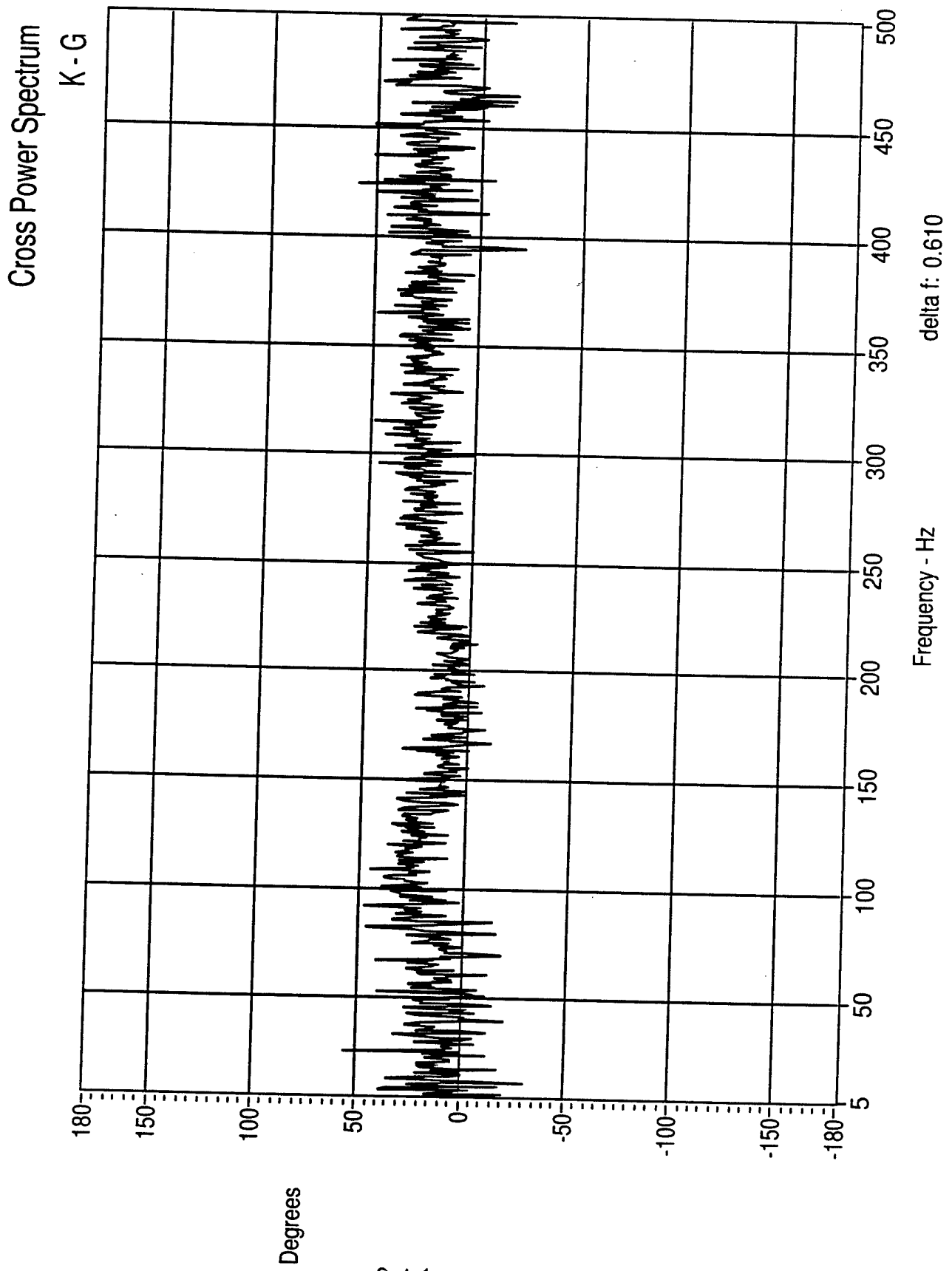
F-15 TPN\_2870:  $\alpha=20$   $\beta=-4$   $\text{bp}=0$



F-15 TPN\_2872: alpha=24 beta=-4 bp=0



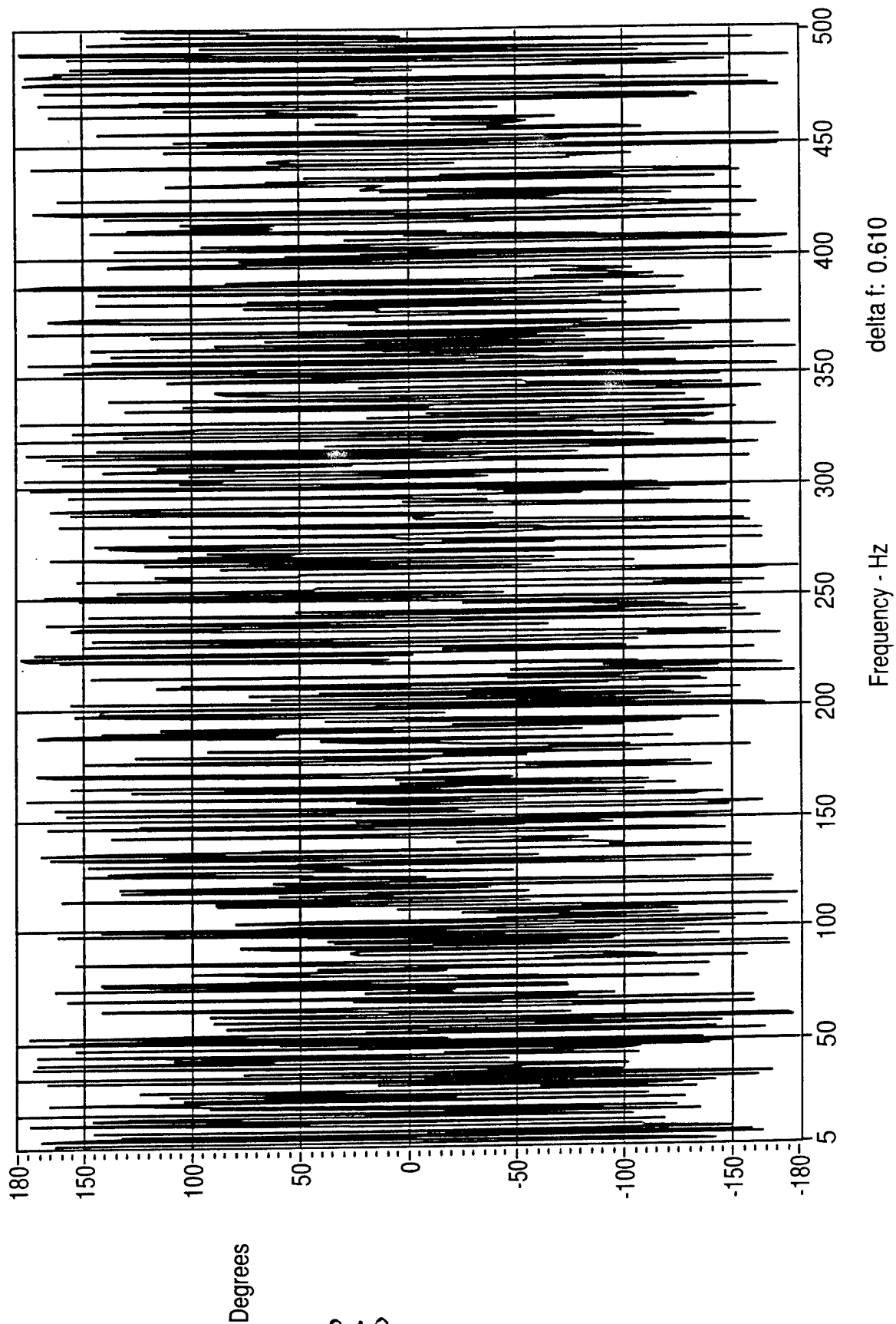
F-15 TPN\_2874: alpha=32 beta=-4 bp=0



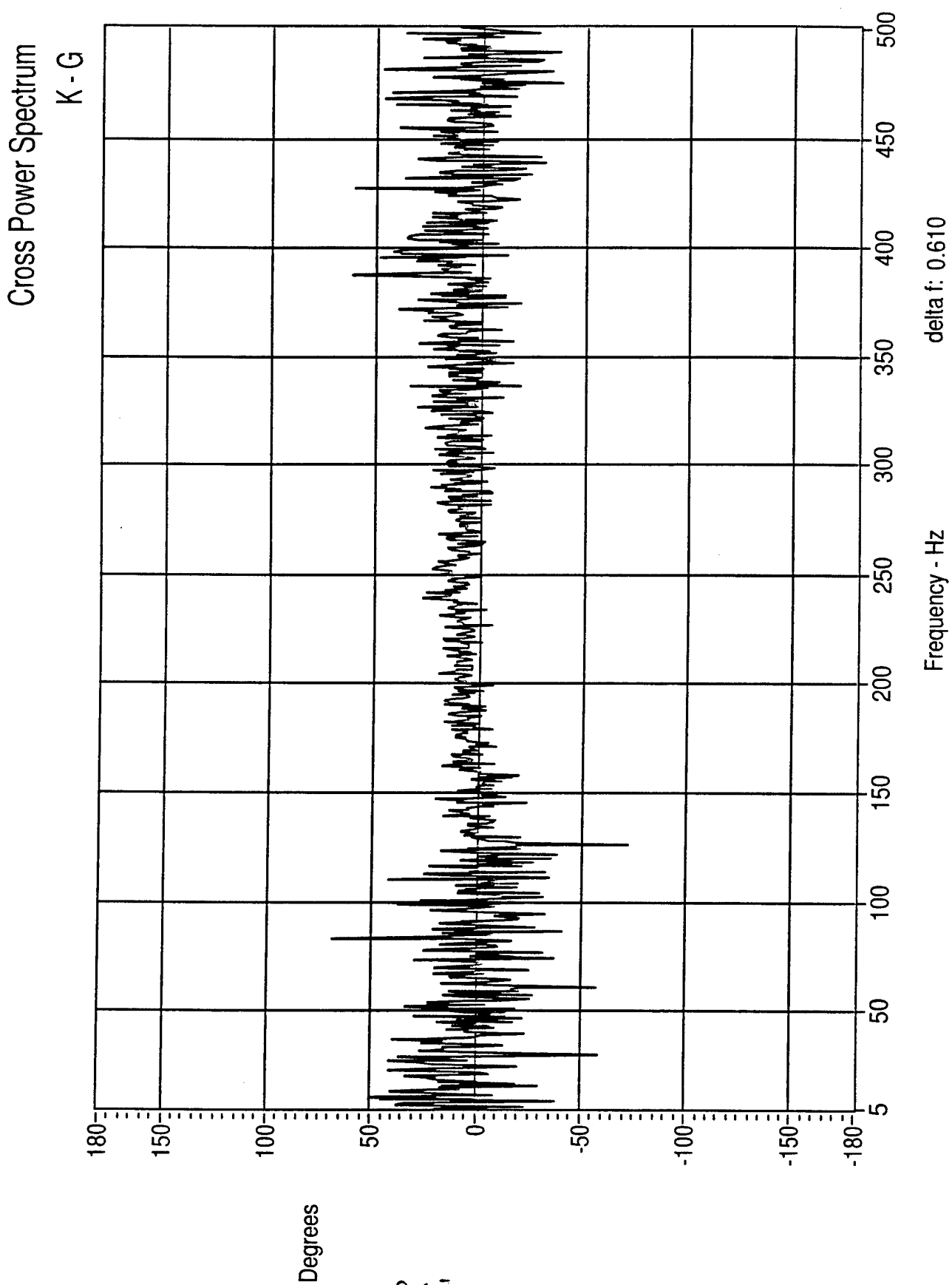
F-15 TPN\_3351:  $\alpha=8$   $\beta=4$   $\text{bp}=45$

# Cross Power Spectrum

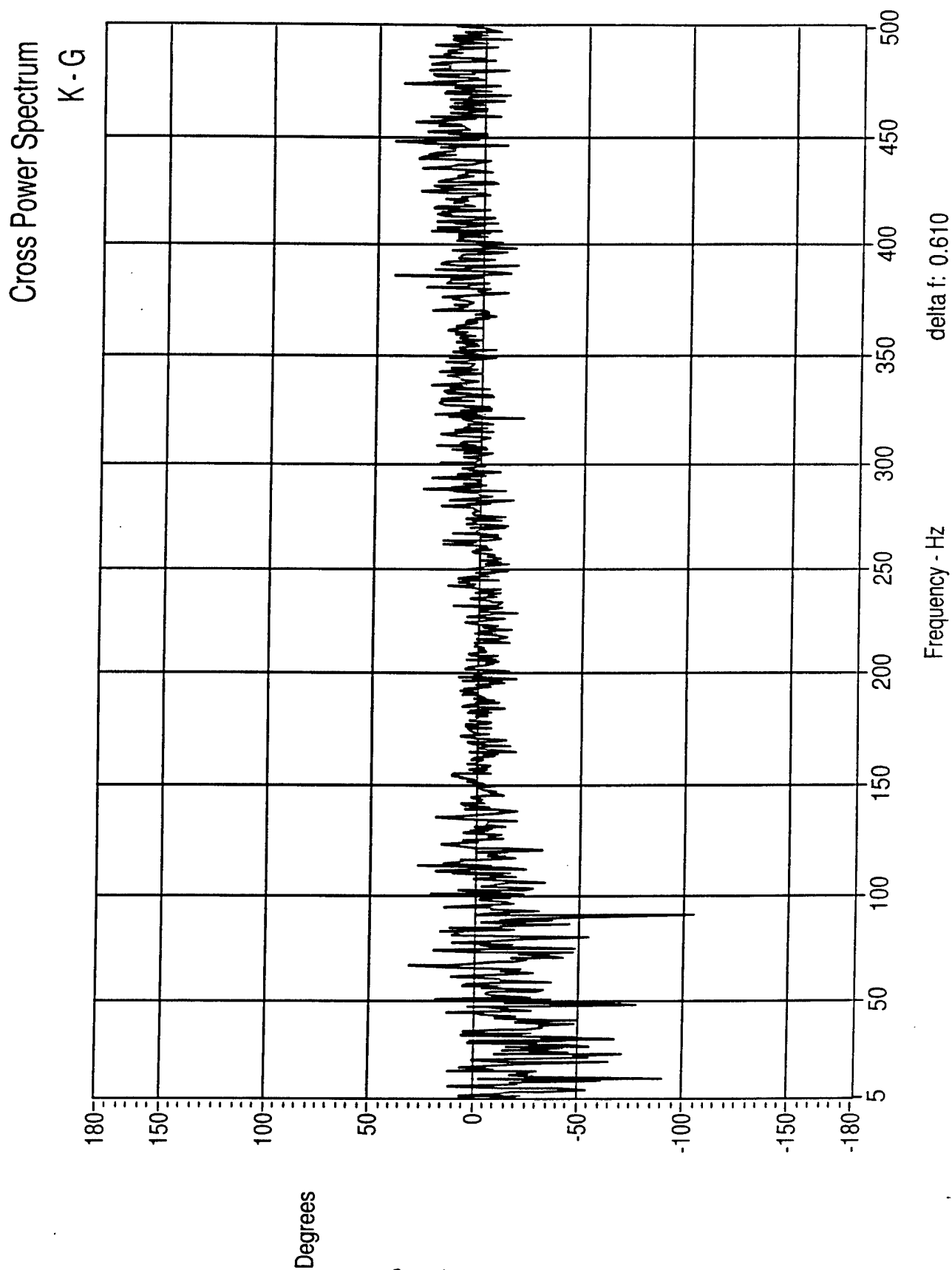
K - G



F-15 TPN\_3357: alpha=20 beta=4 bp=45

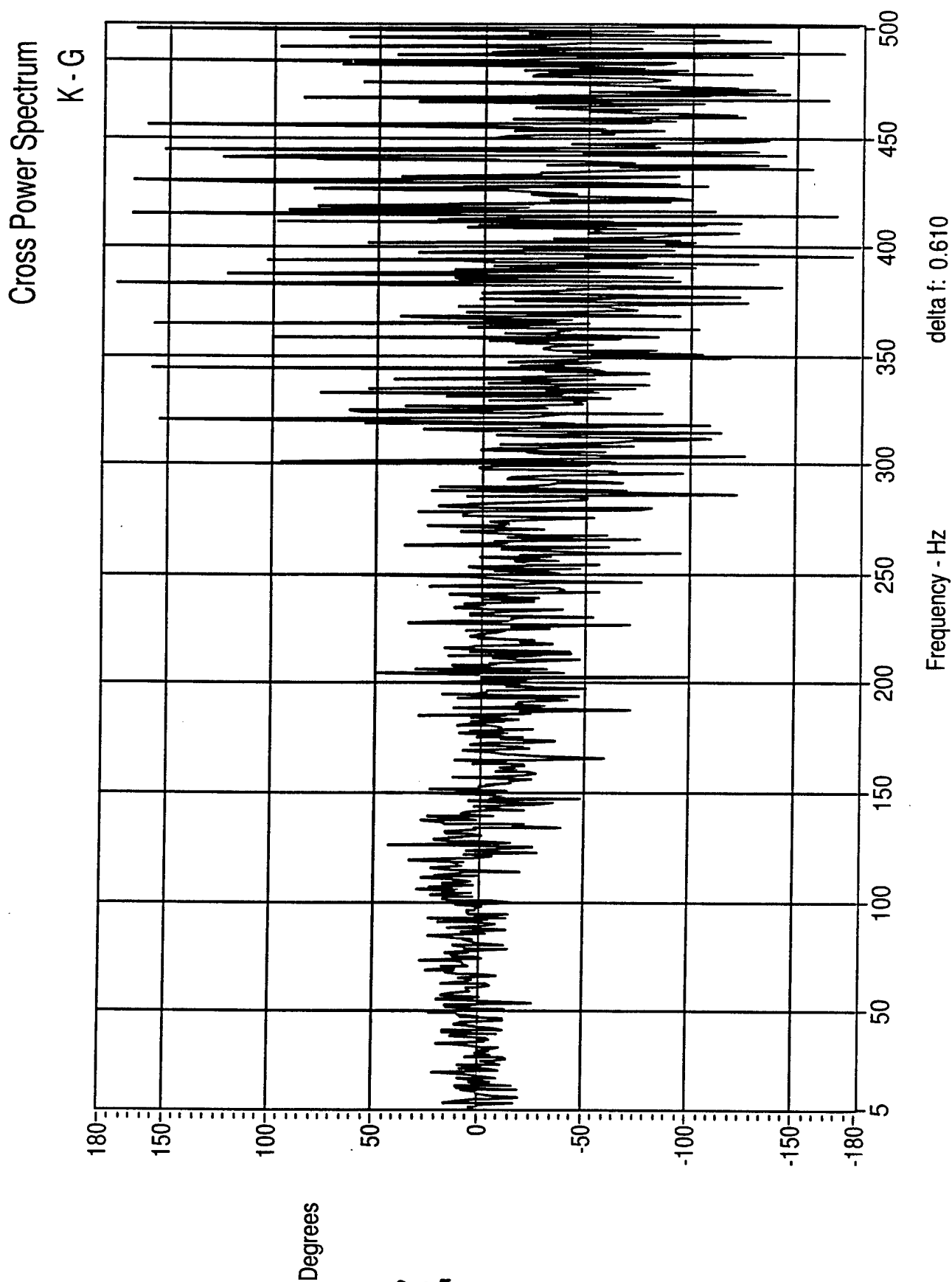


F-15 TPN\_3359: alpha=24 beta=4 bp=45

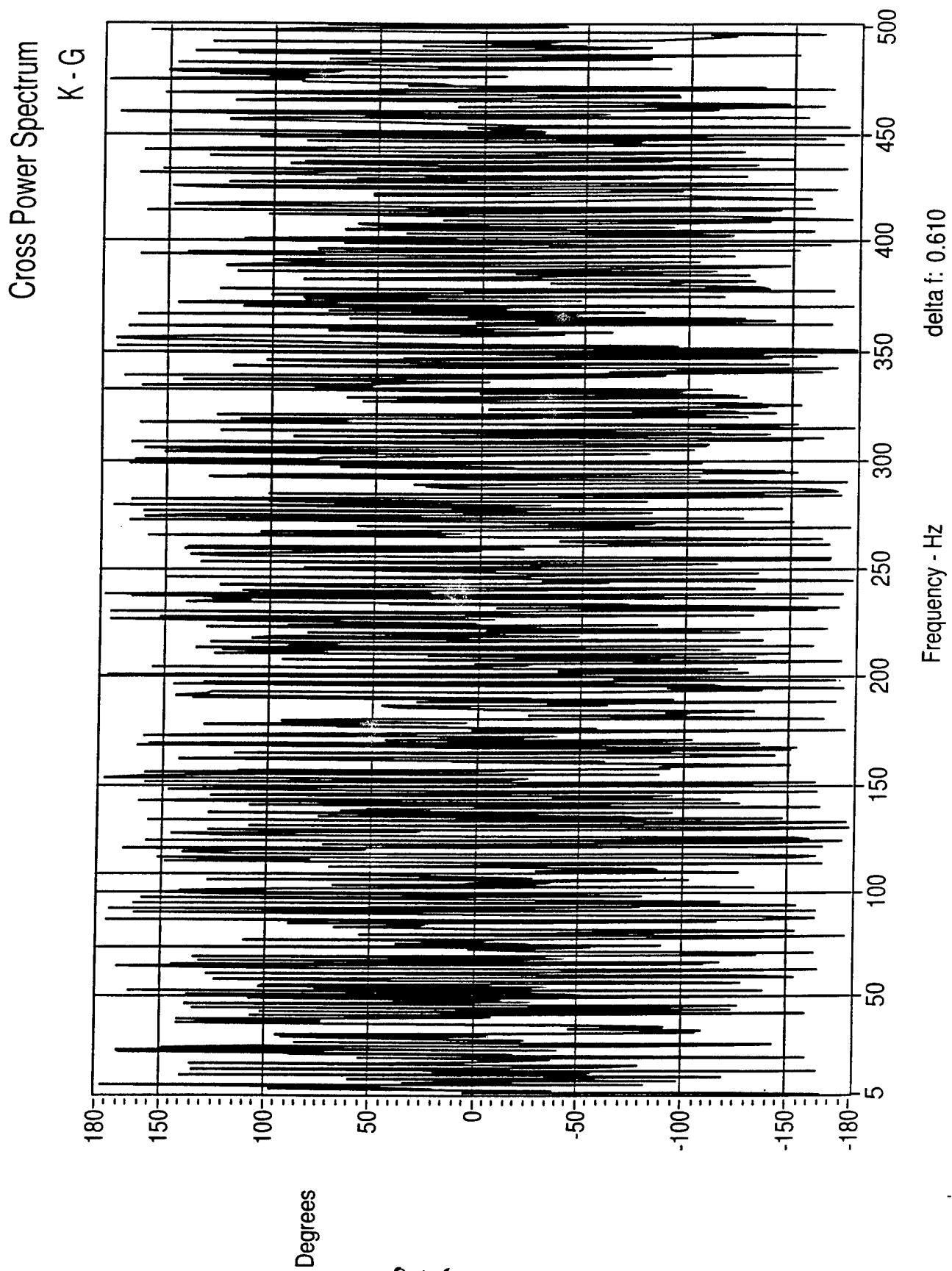




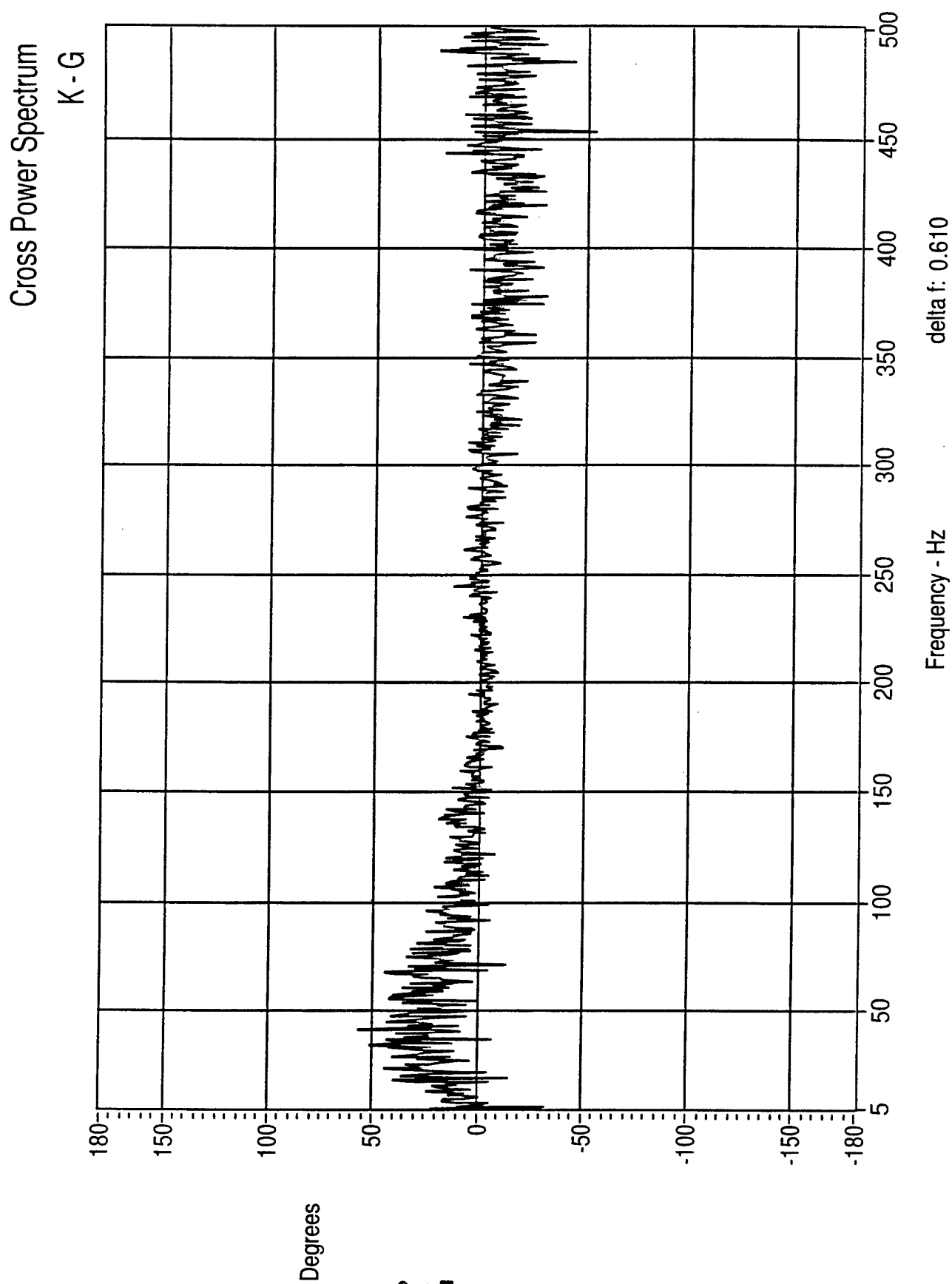
F-15 TPN\_3361: alpha=32 beta=4 bp=45



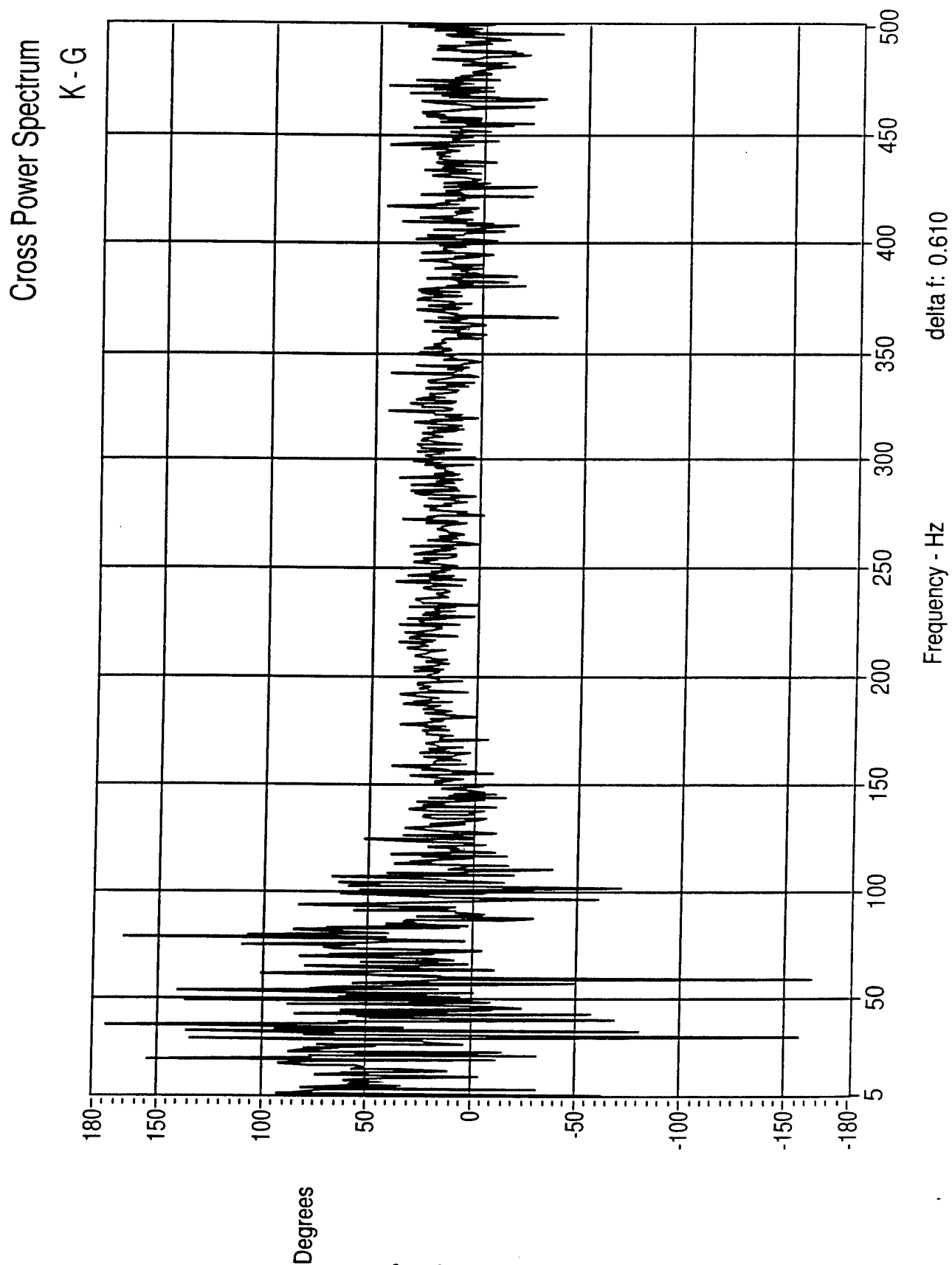
F-15 TPN\_3333: alpha=8 beta=0 bp=45



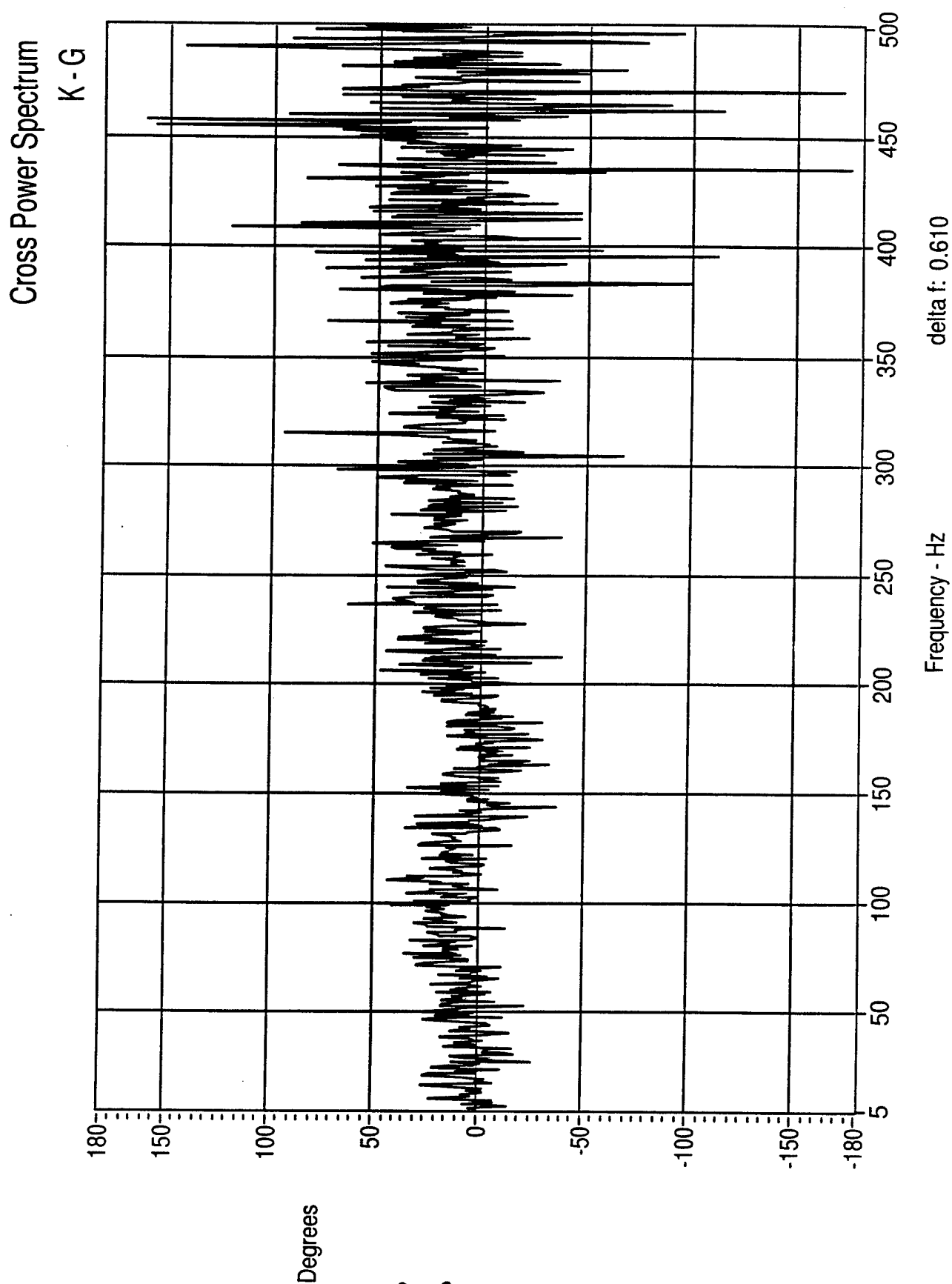
F-15 TPN\_3339: alpha=20 beta=0 bp=45



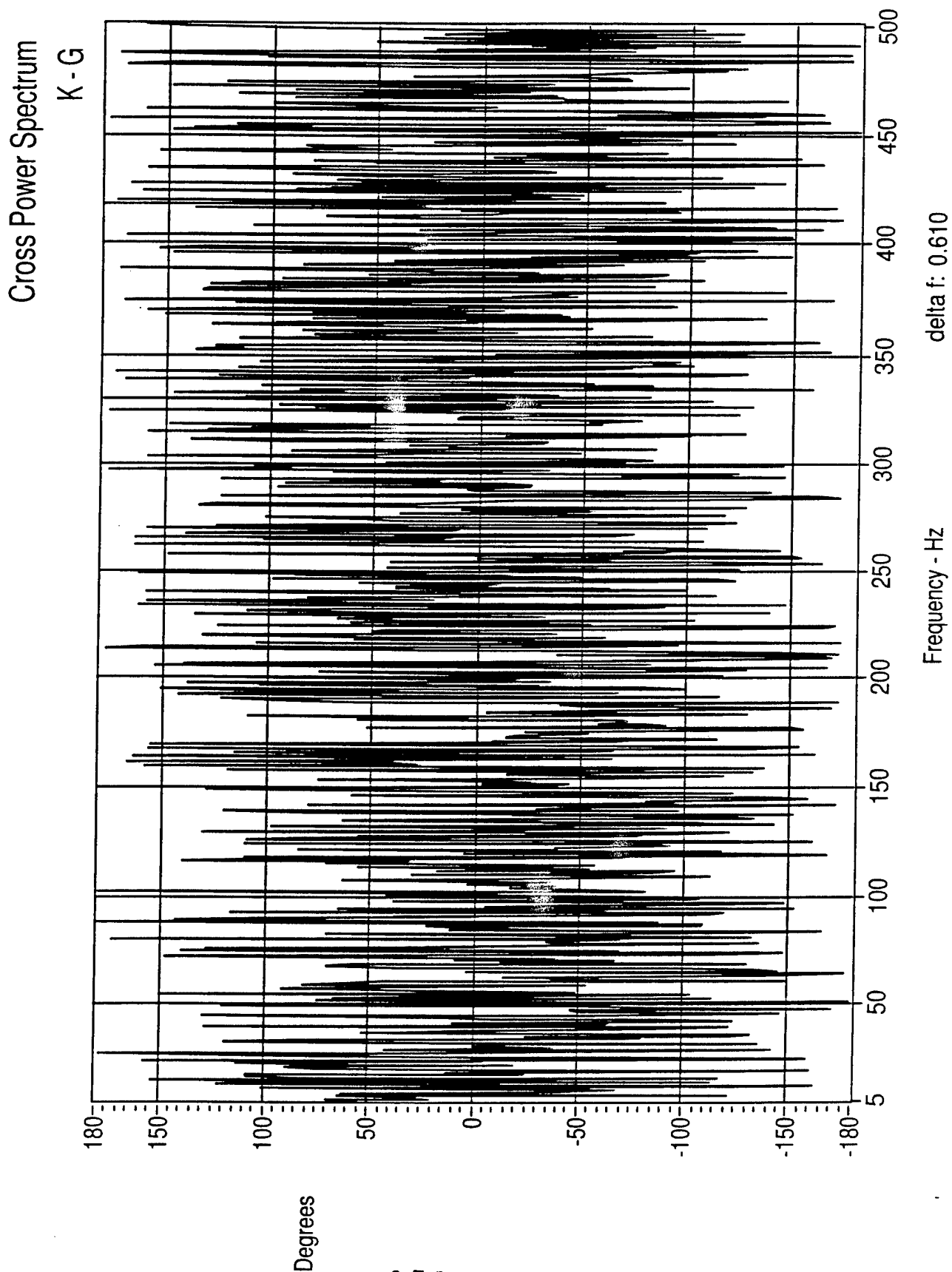
F-15 TPN\_3341: alpha=24 beta=0 bp=45



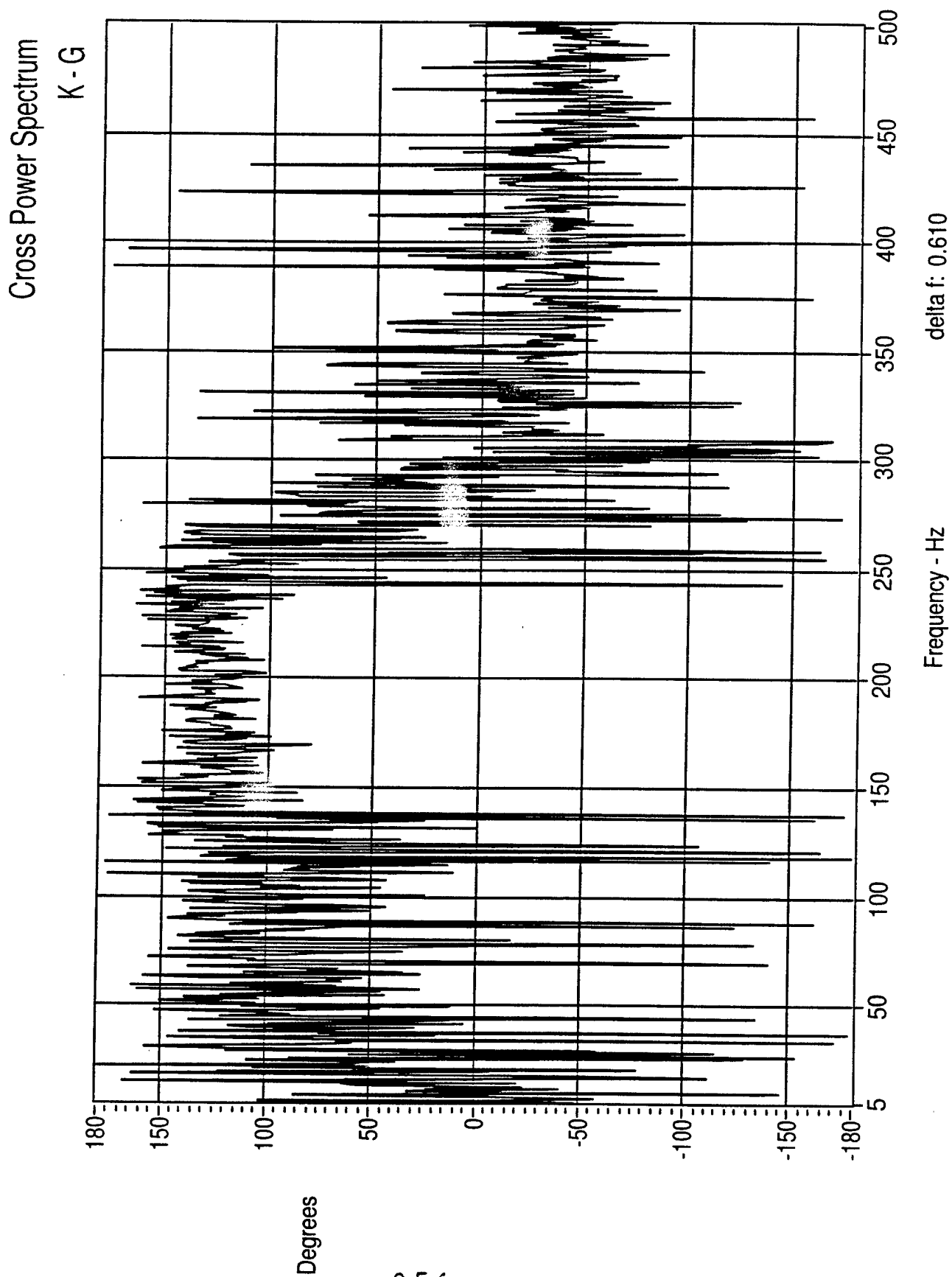
F-15 TPN\_3343: alpha=32 beta=0 bp=45



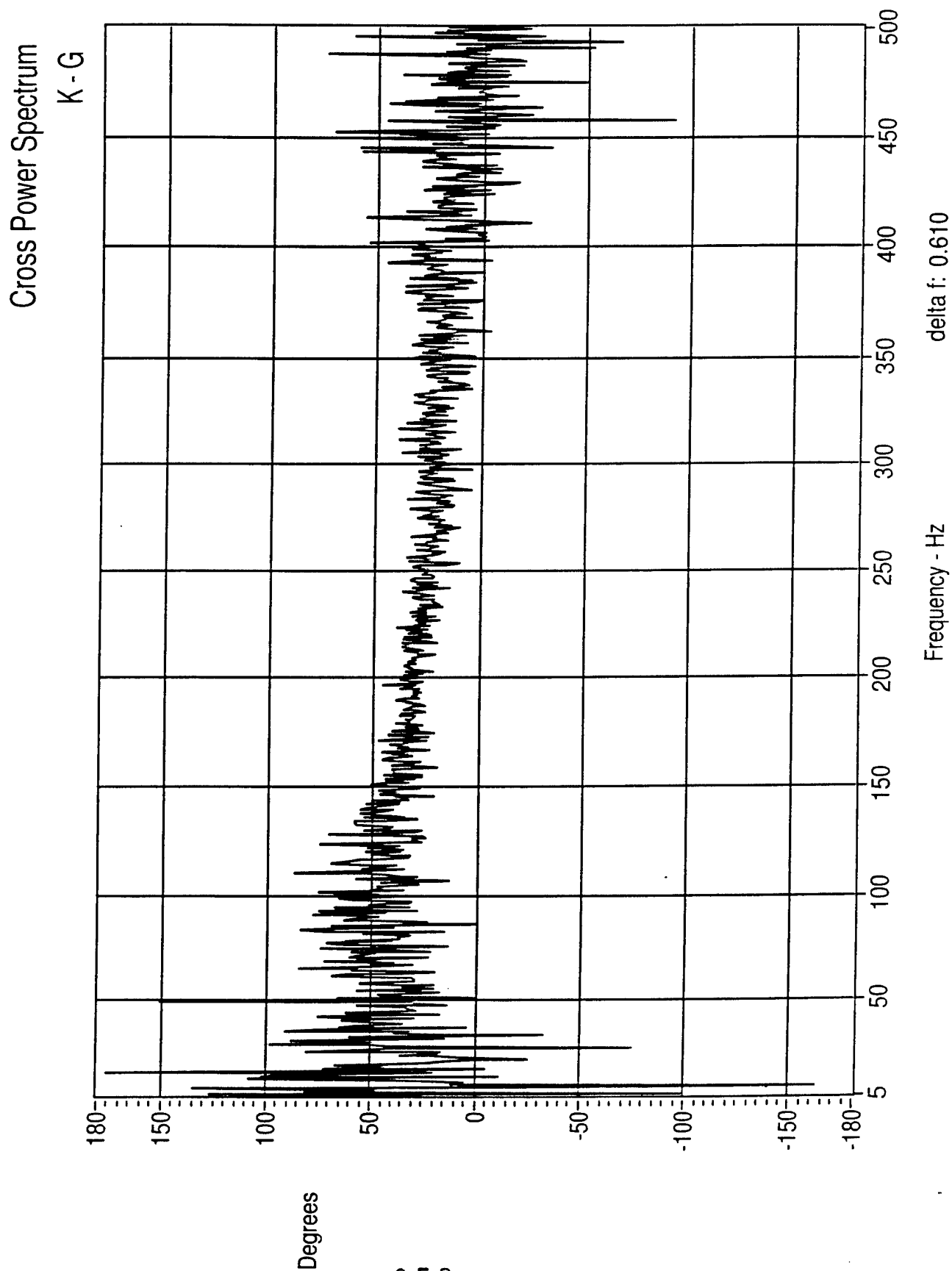
F-15 TPN\_3369: alpha=8 beta=-4 bp=45



F-15 TPN\_3375: alpha=20 beta=-4 bp=45

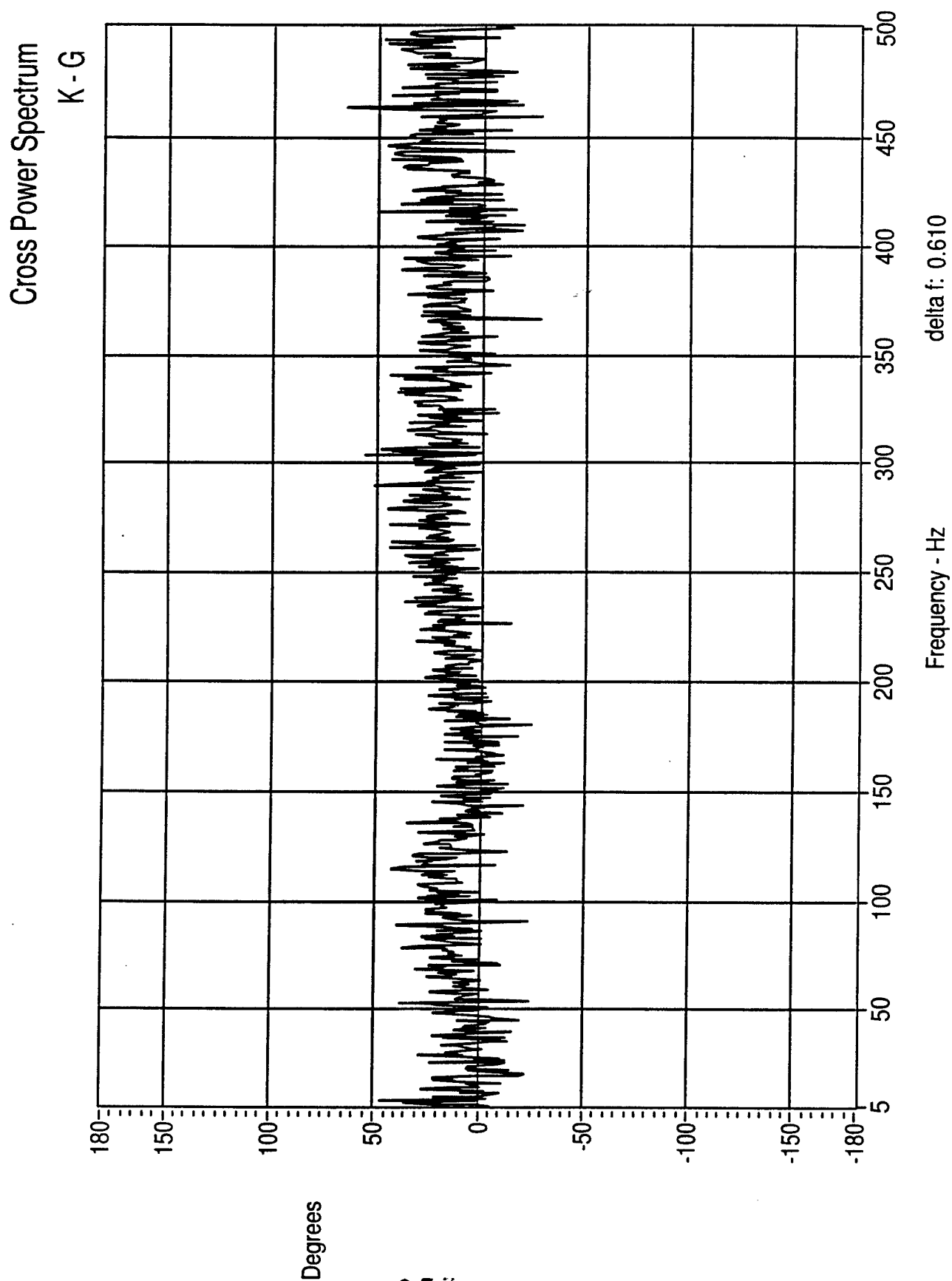


F-15 TPN\_3377: alpha=24 beta=-4 bp=45

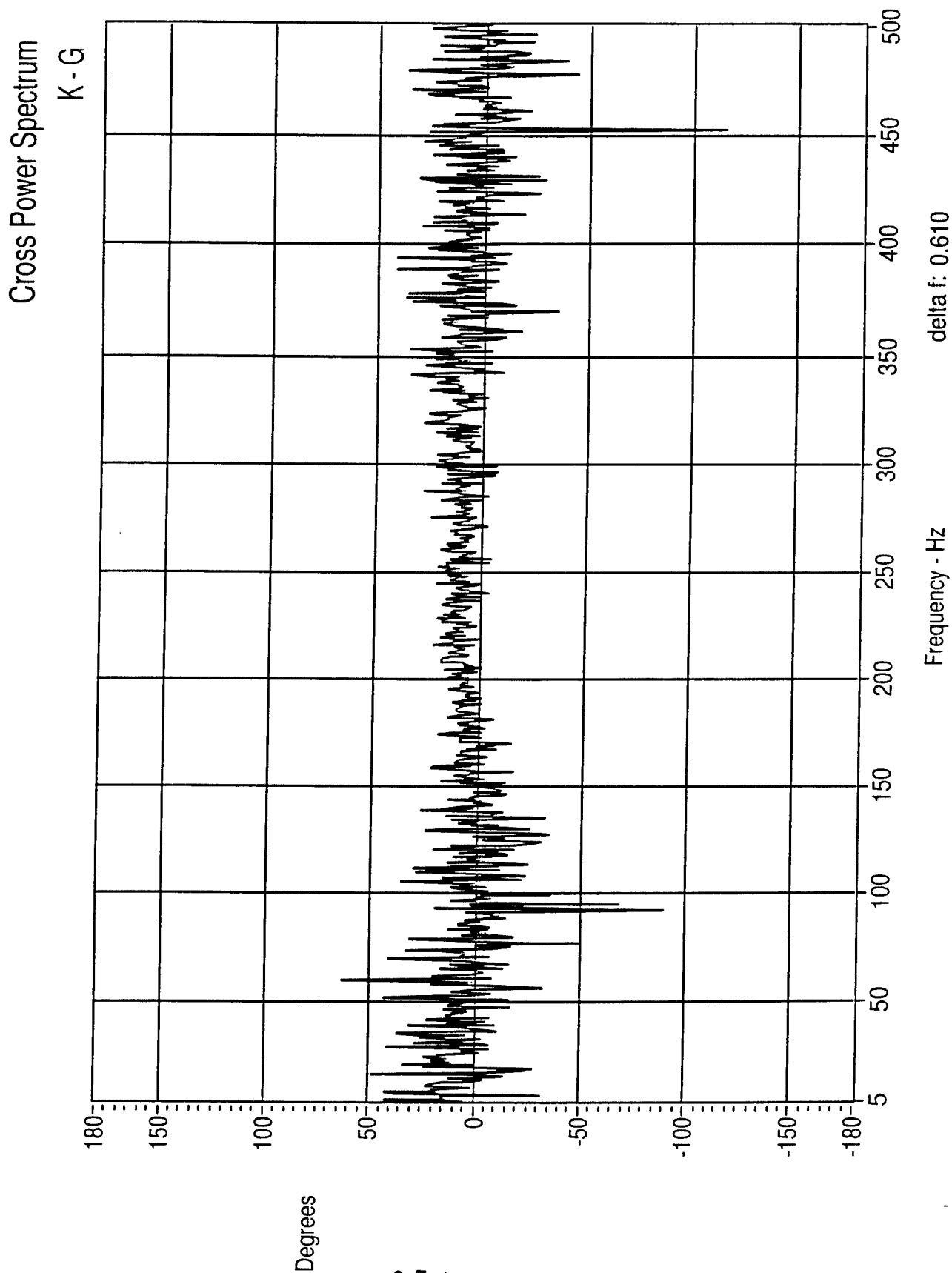




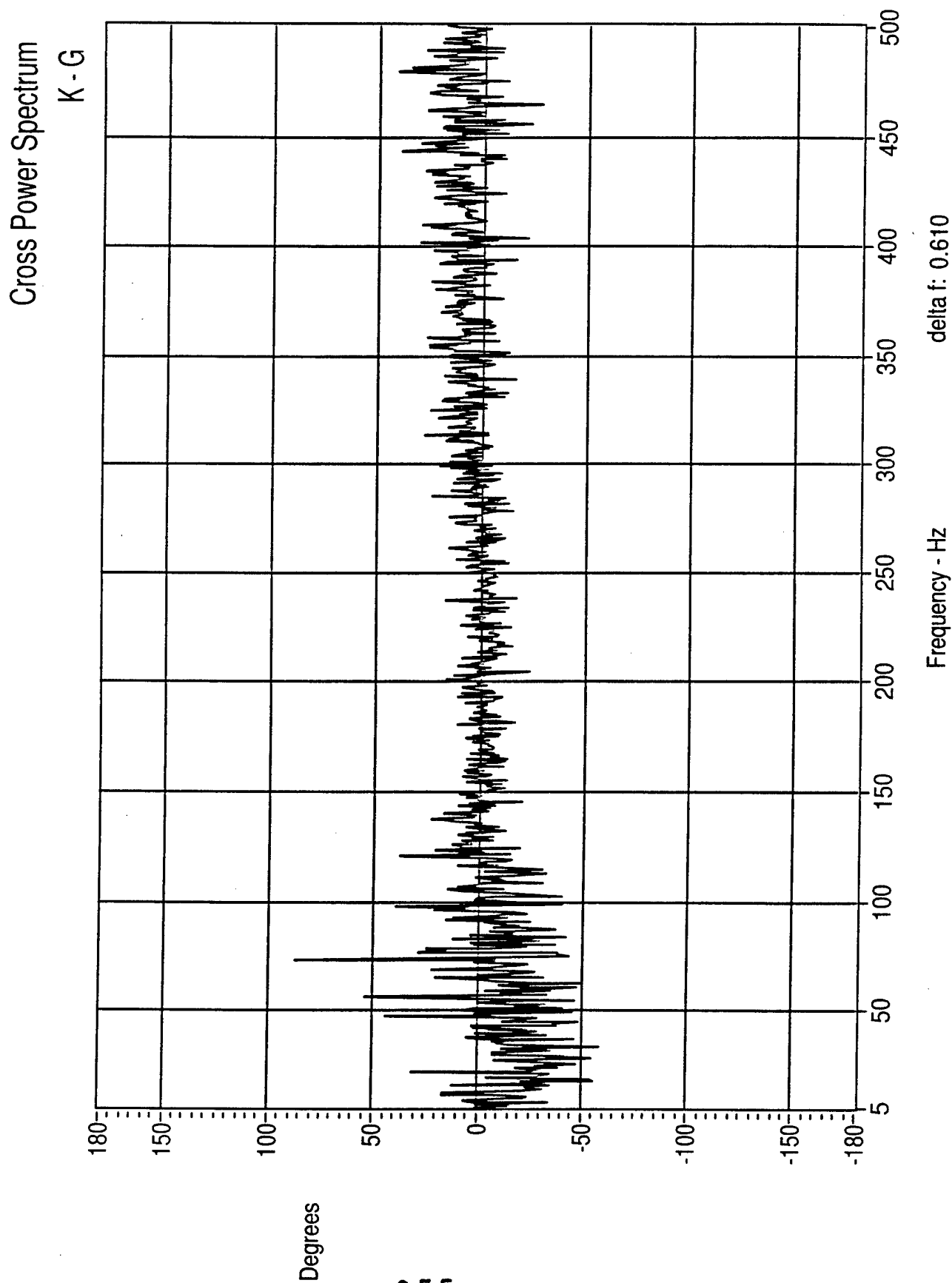
F-15 TPN\_3379: alpha=32 beta=-4 bp=45



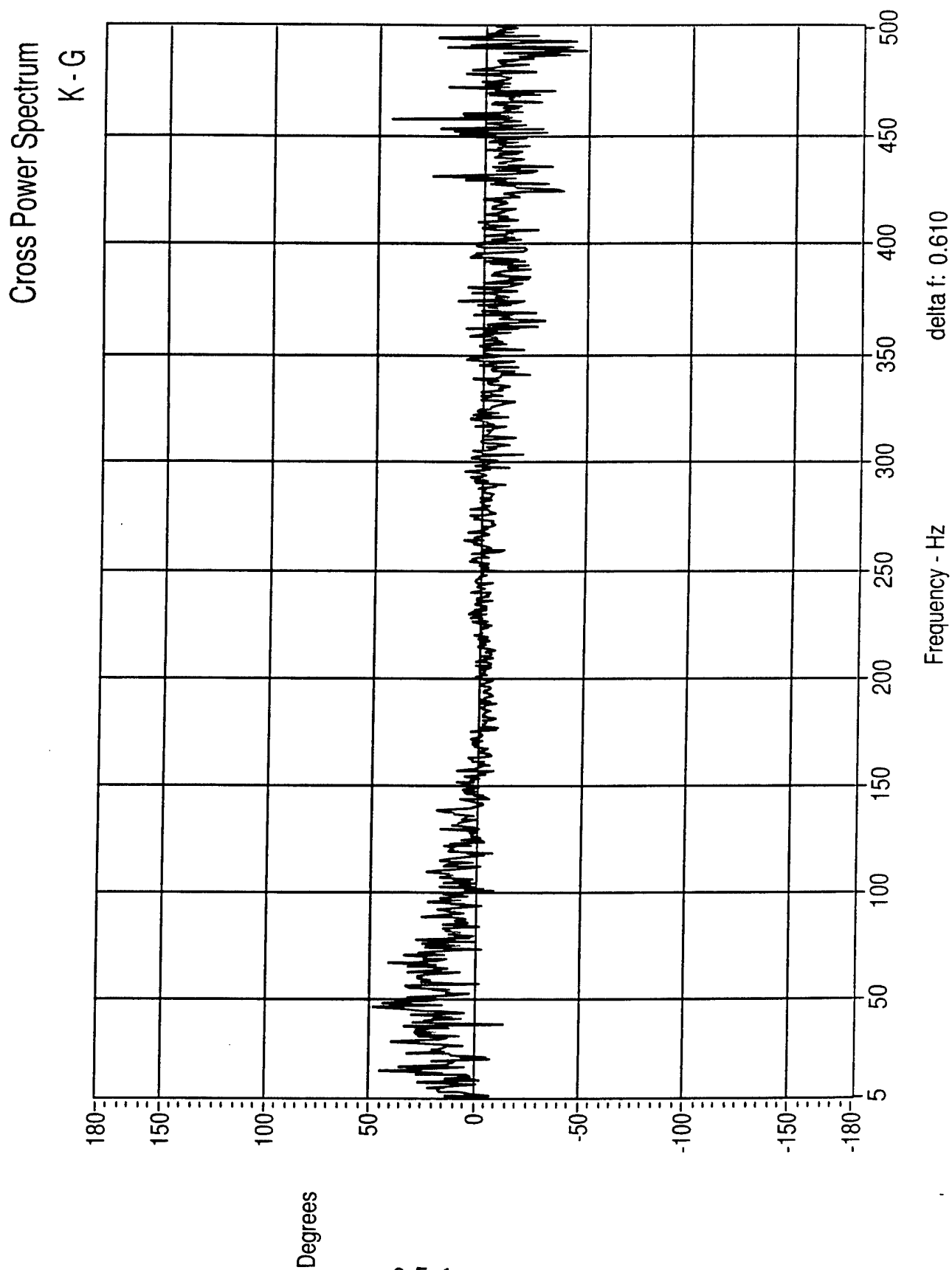
F-15 TPN\_3046: alpha=20 beta=4 bp=65



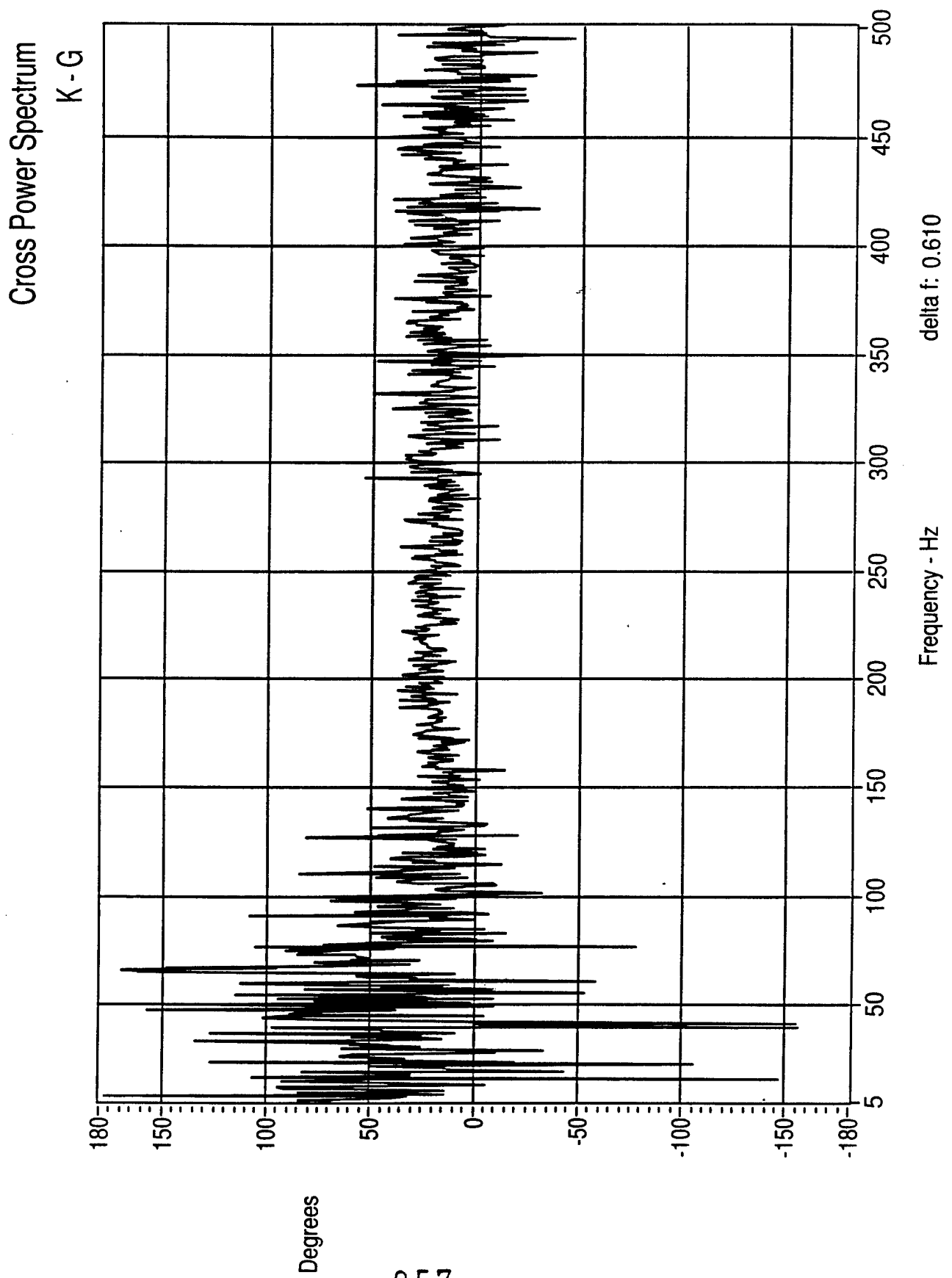
F-15 TPN\_3048: alpha=24 beta=4 bp=65



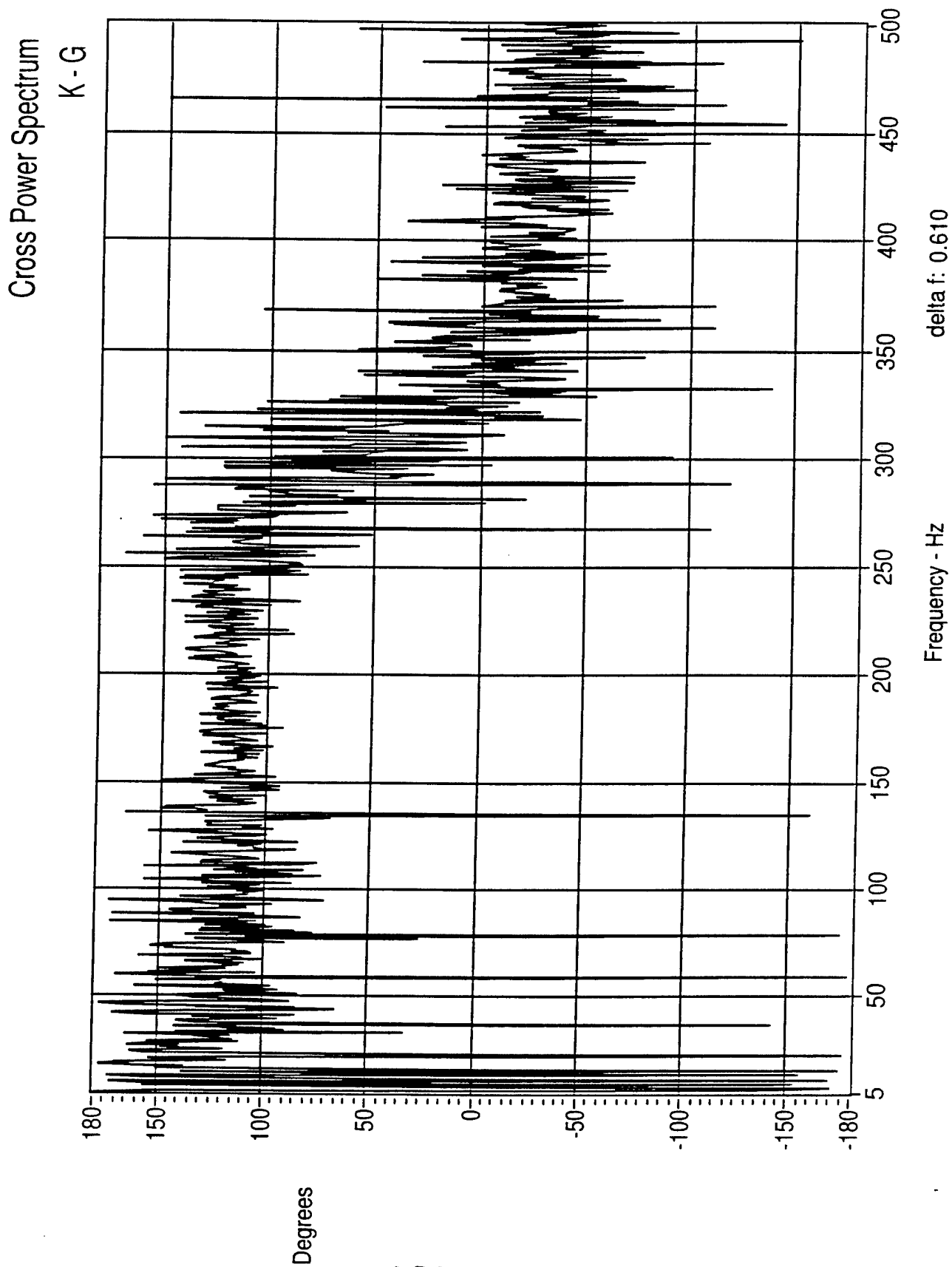
F-15 TPN\_3040: alpha=20 beta=0 bp=65



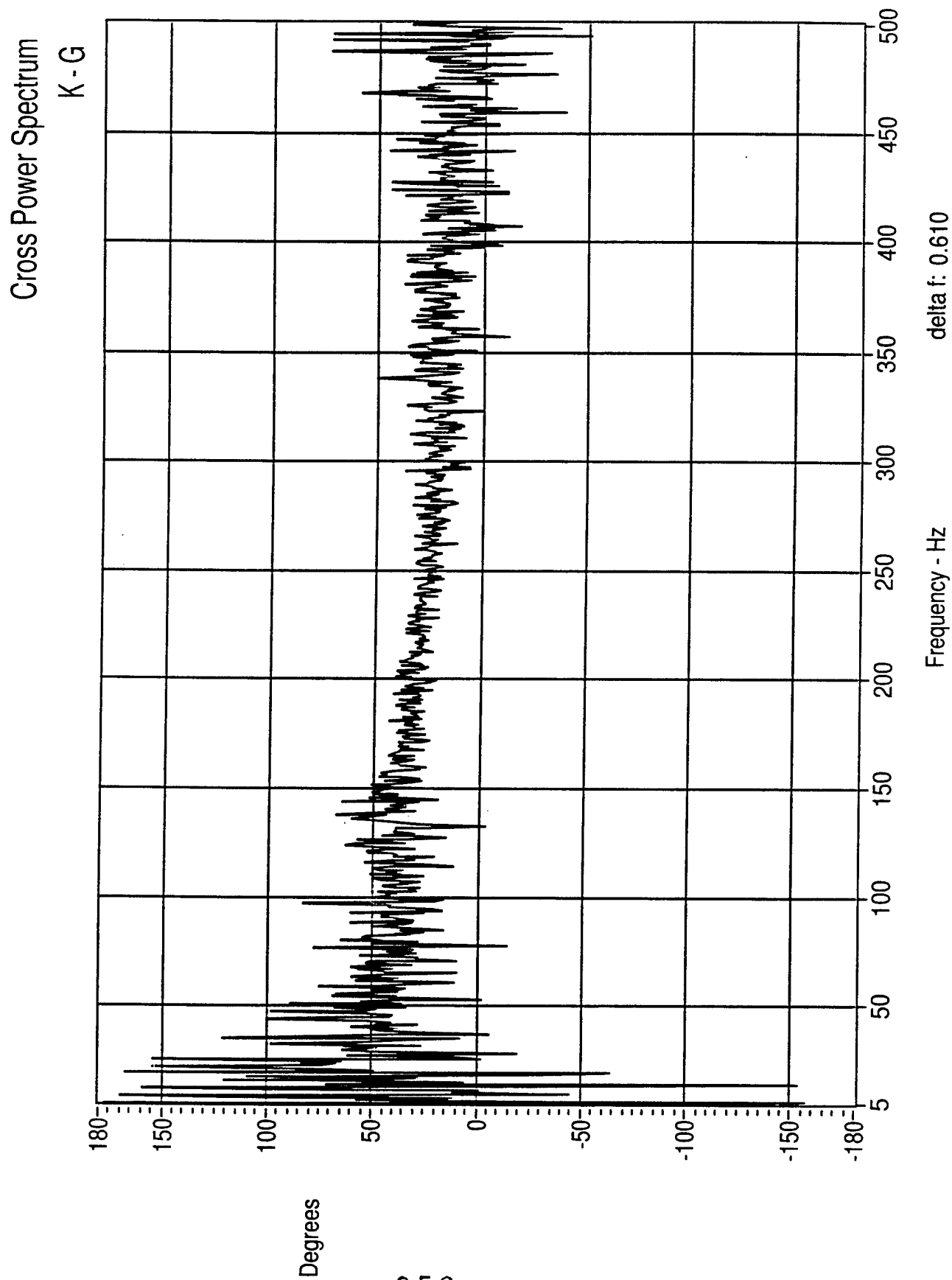
F-15 TPN\_3042: alpha=24 beta=0 bp=65



F-15 TPN\_3034: alpha=20 beta=-4 bp=65



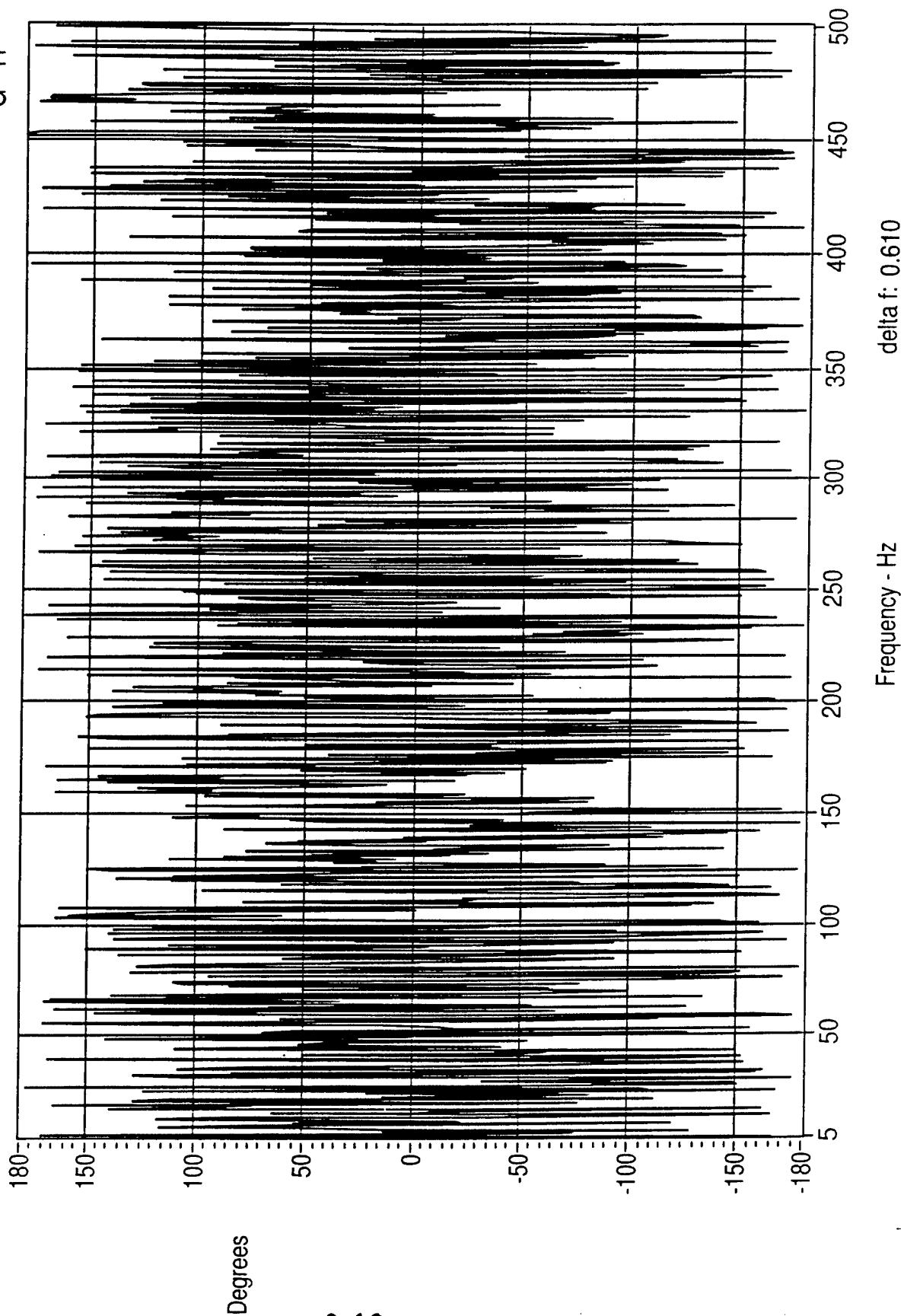
F-15 TPN\_3036: alpha=24 beta=-4 bp=65



F-15 TPN\_2918: alpha=8 beta=4 bp=0

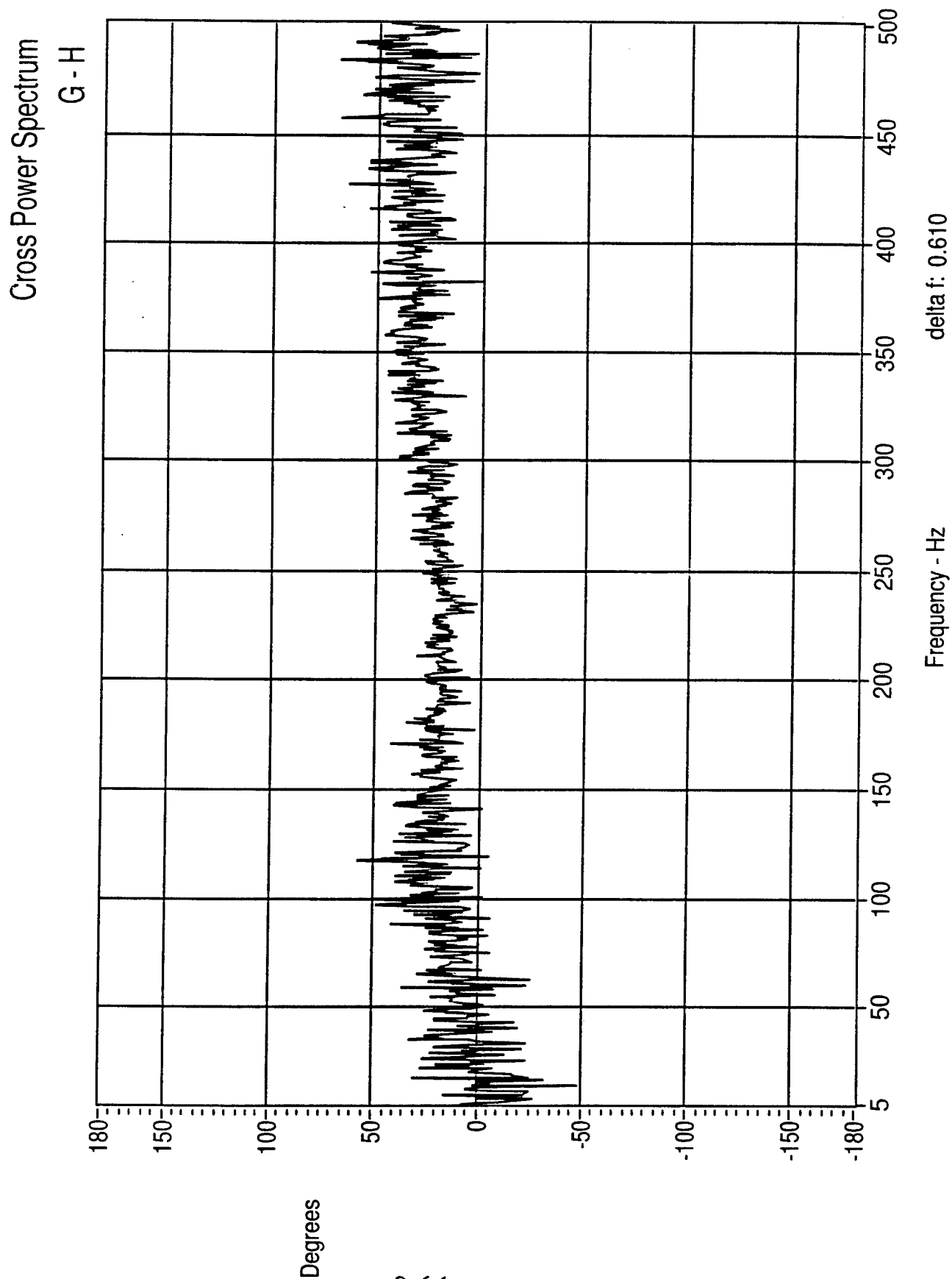
Cross Power Spectrum

G - H





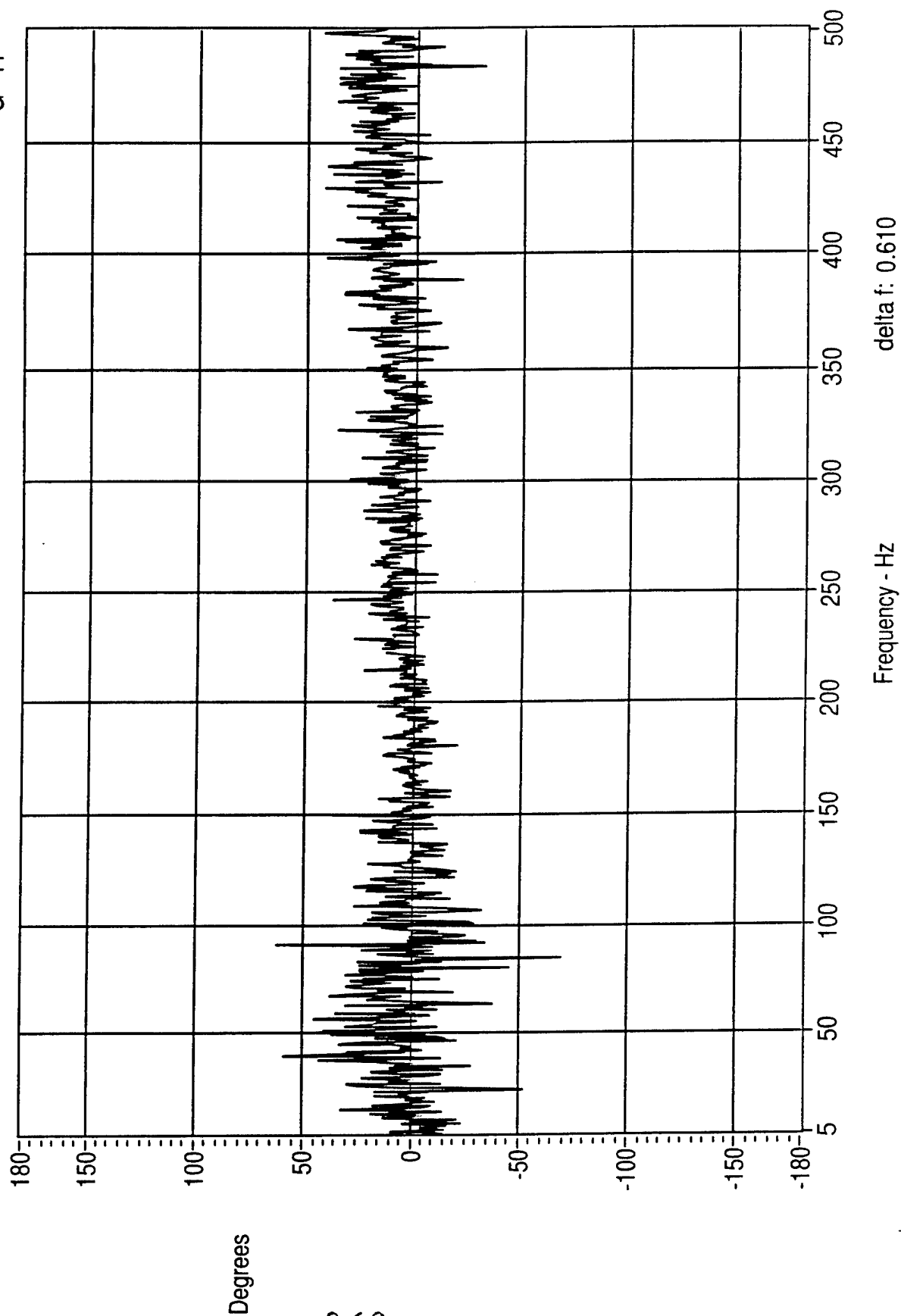
F-15 TPN\_2924: alpha=20 beta=4 bp=0



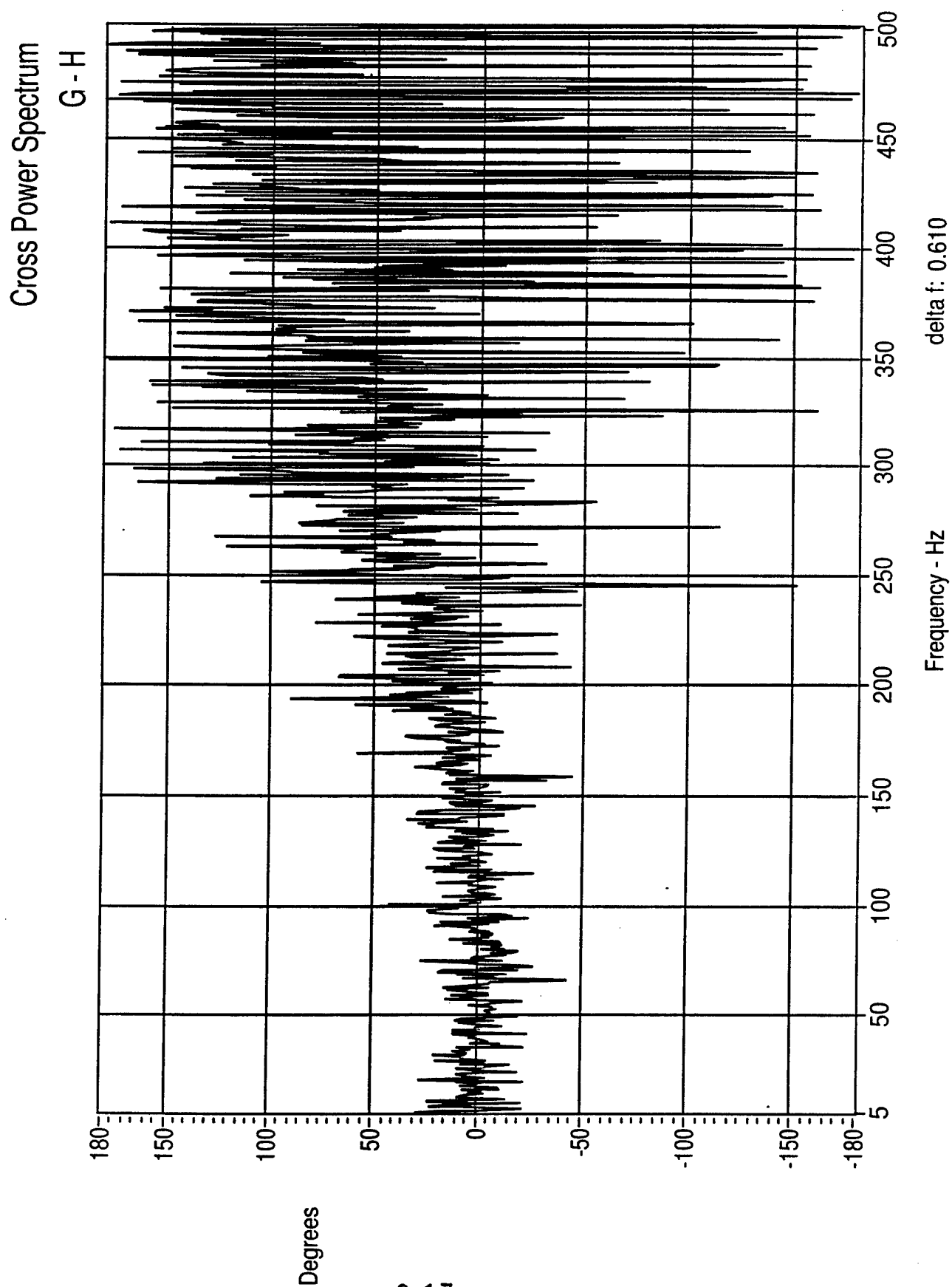
F-15 TPN\_2926: alpha=24 beta=4 bp=0

# Cross Power Spectrum

G-H

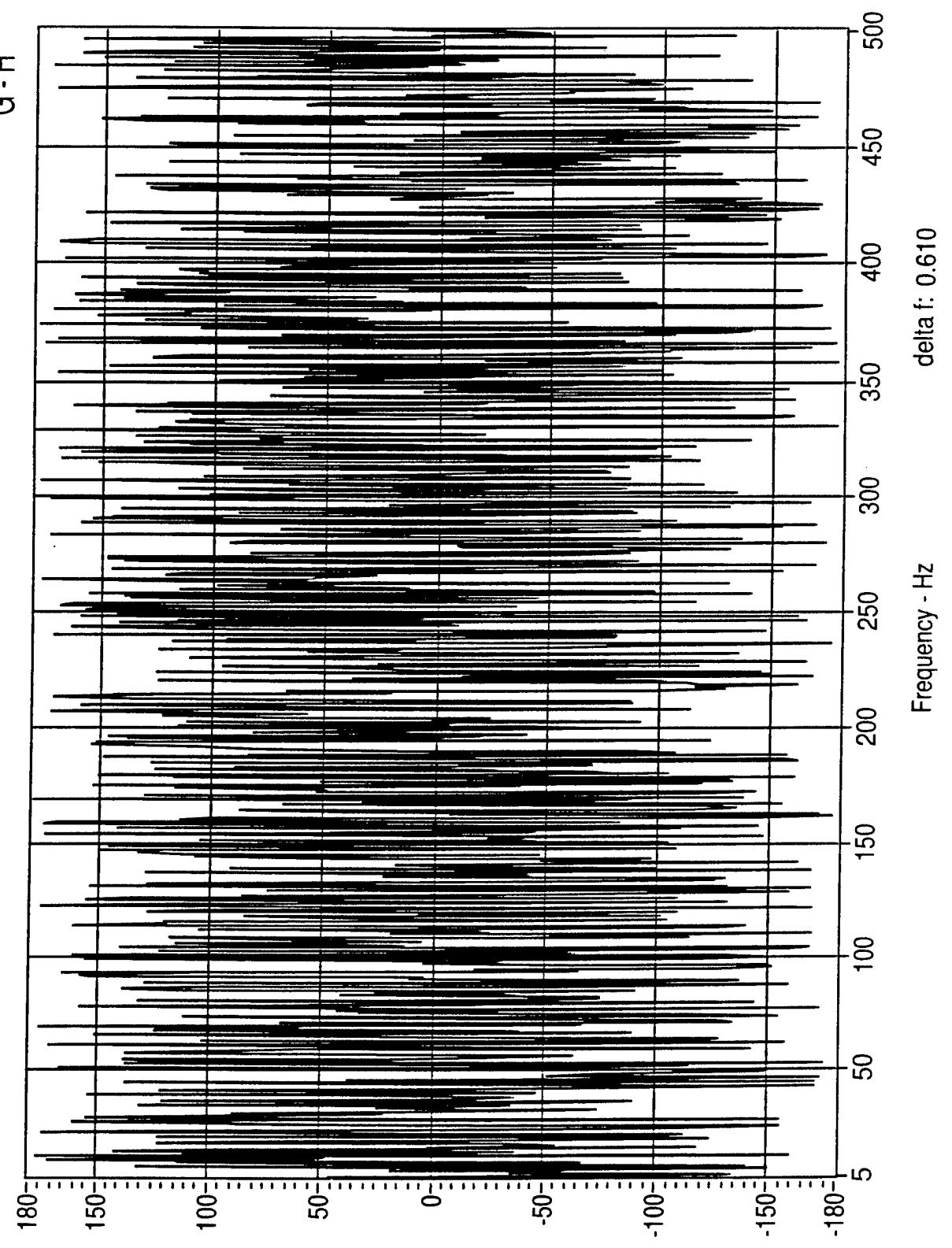


F-15 TPN\_2928: alpha=32 beta=4 bp=0

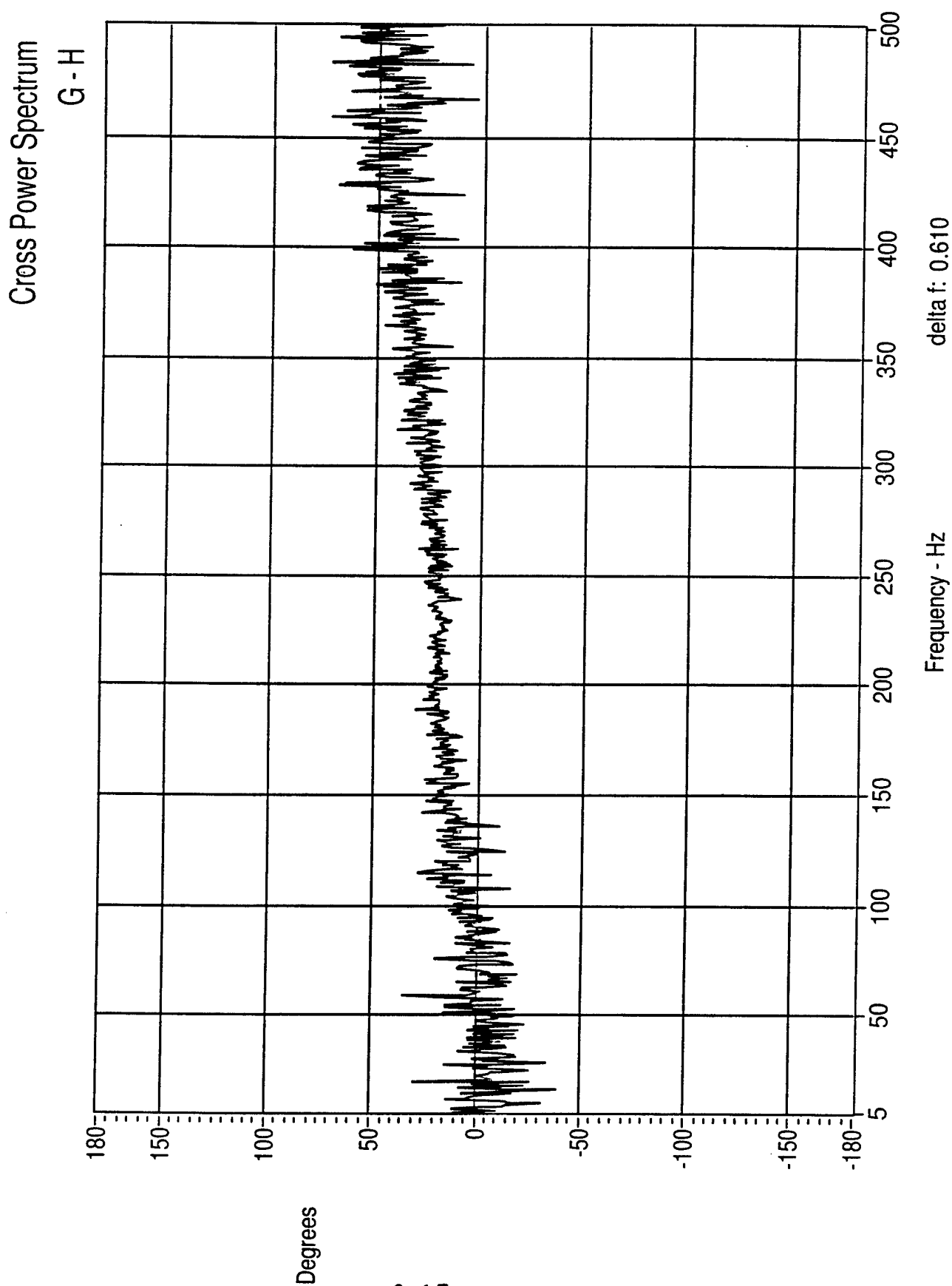


F-15 TPN\_2844: alpha=8 beta=0 bp=0

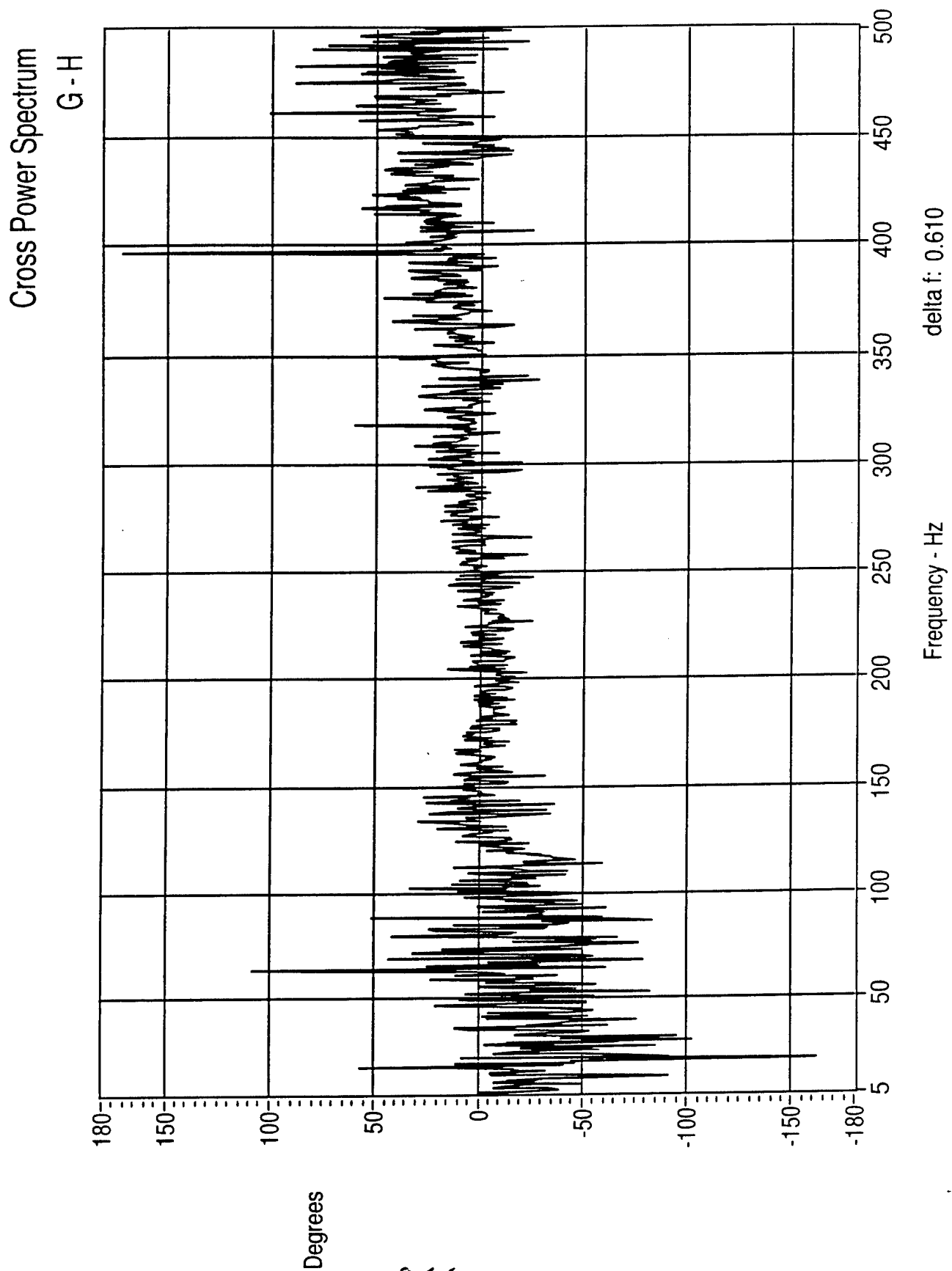
Cross Power Spectrum  
G - H



F-15 TPN\_2850: alpha=20 beta=0 bp=0



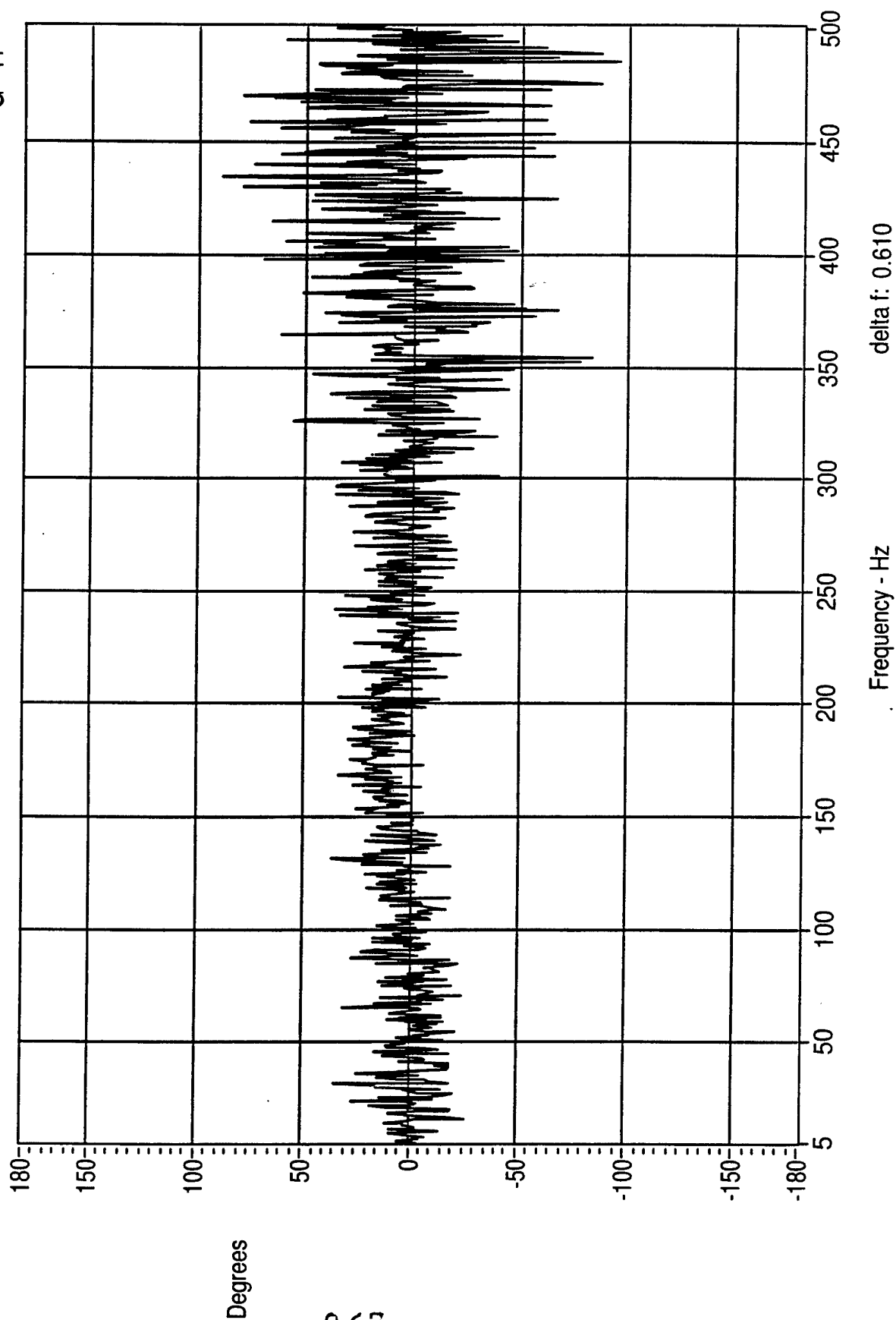
F-15 TPN\_2852: alpha=24 beta=0 bp=0



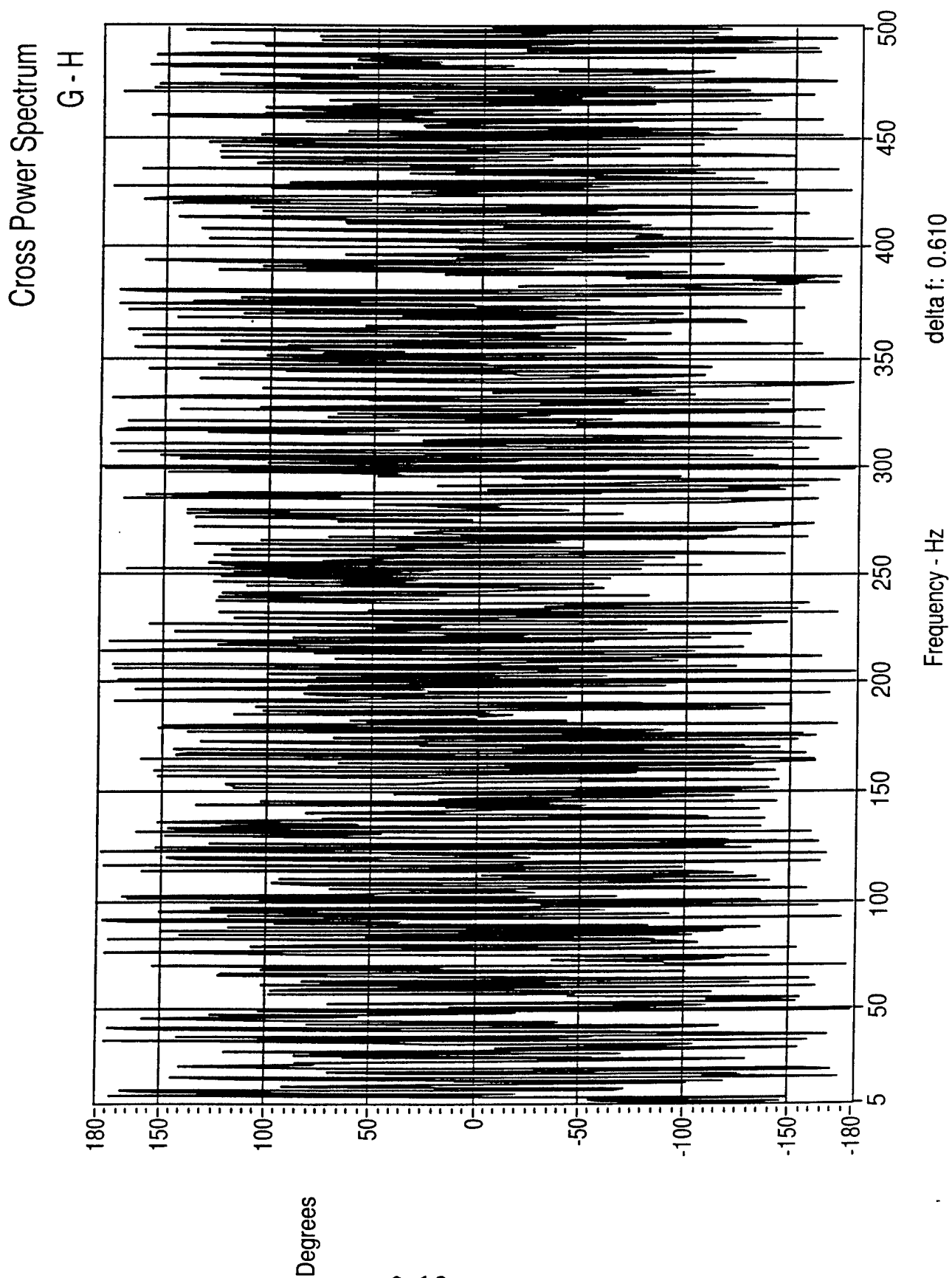
F-15 TPN\_2854: alpha=32 beta=0 bp=0

# Cross Power Spectrum

G - H

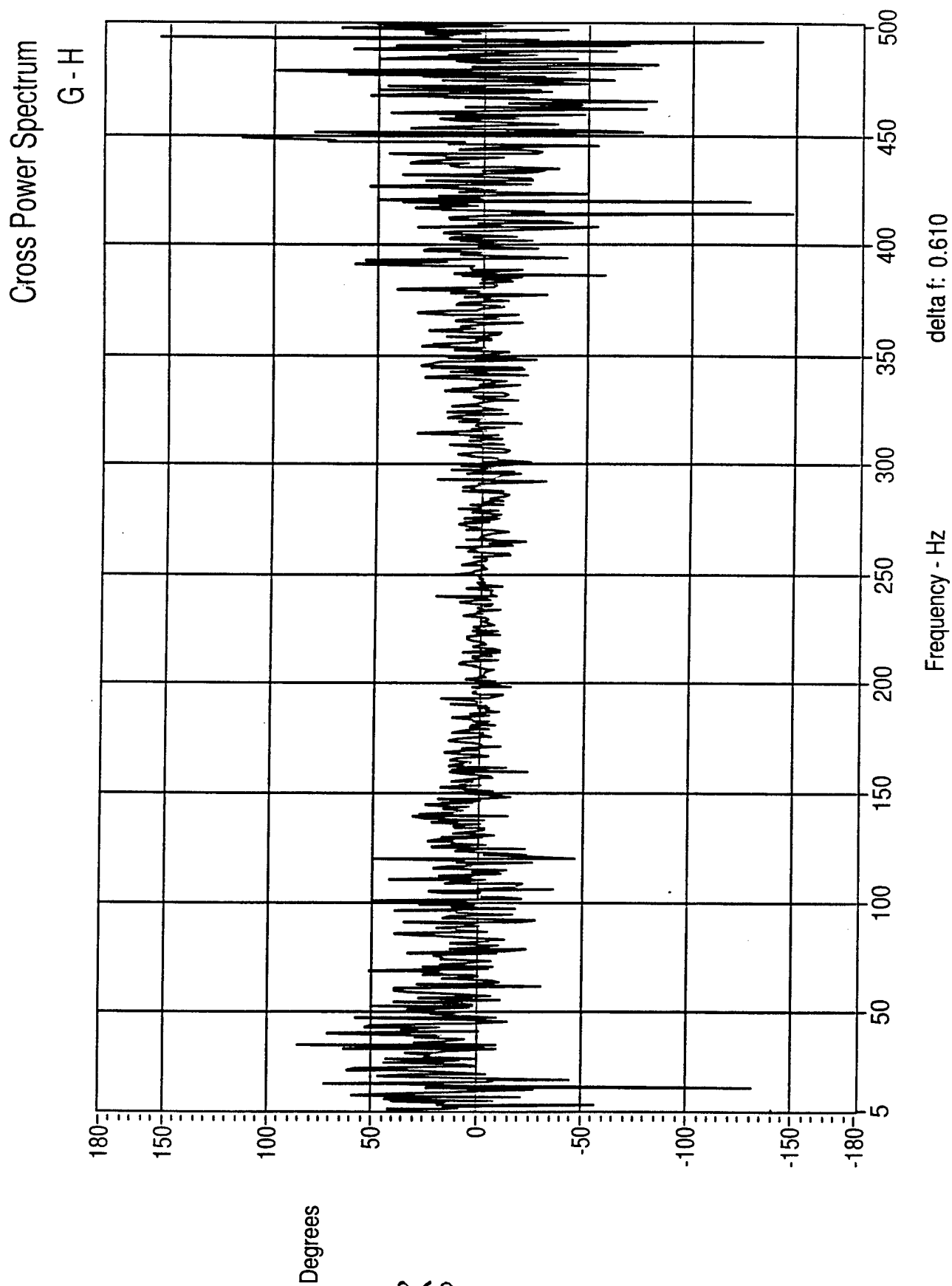


F-15 TPN\_2864:  $\alpha=8$   $\beta=-4$   $\text{bp}=0$

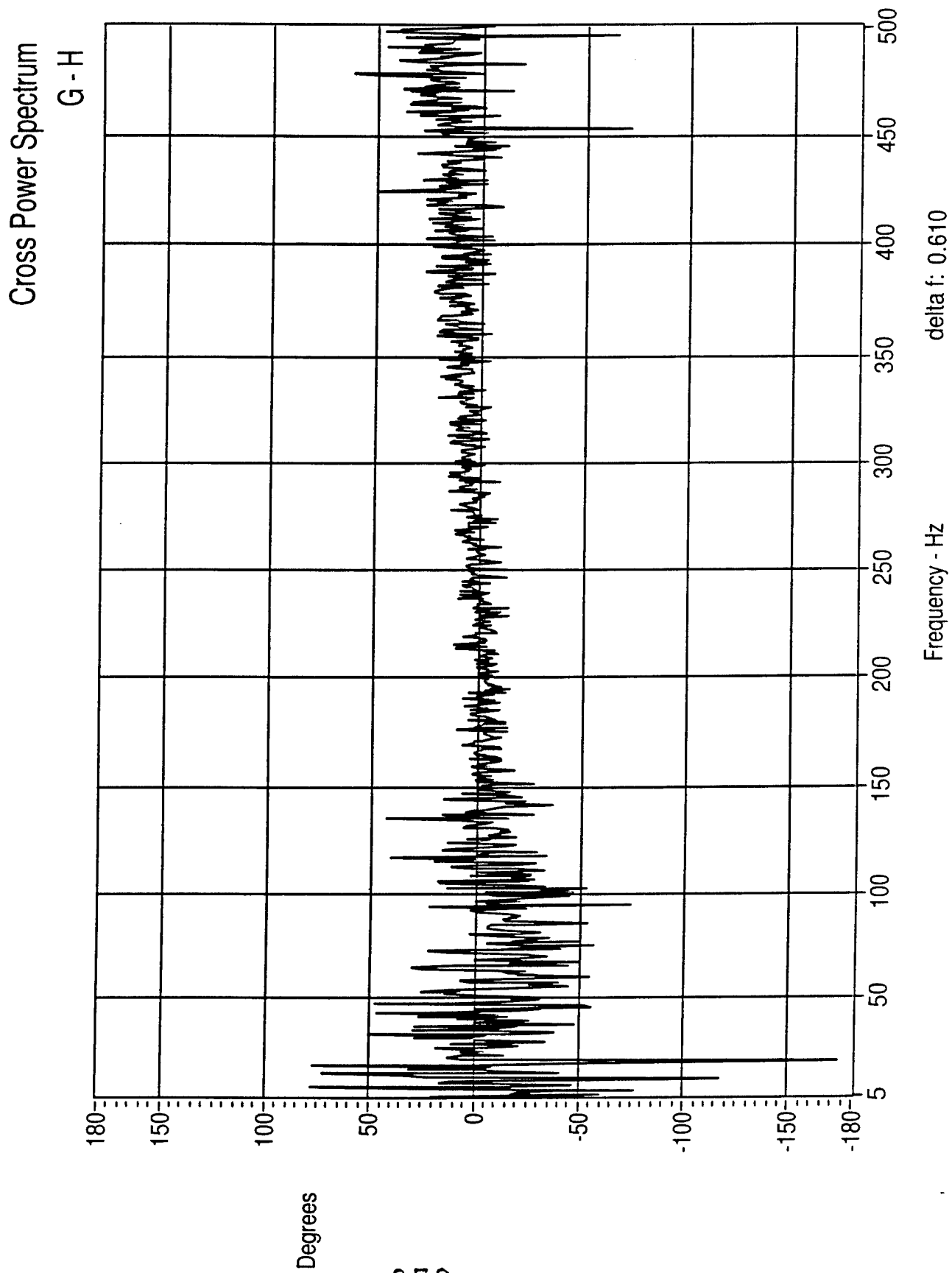




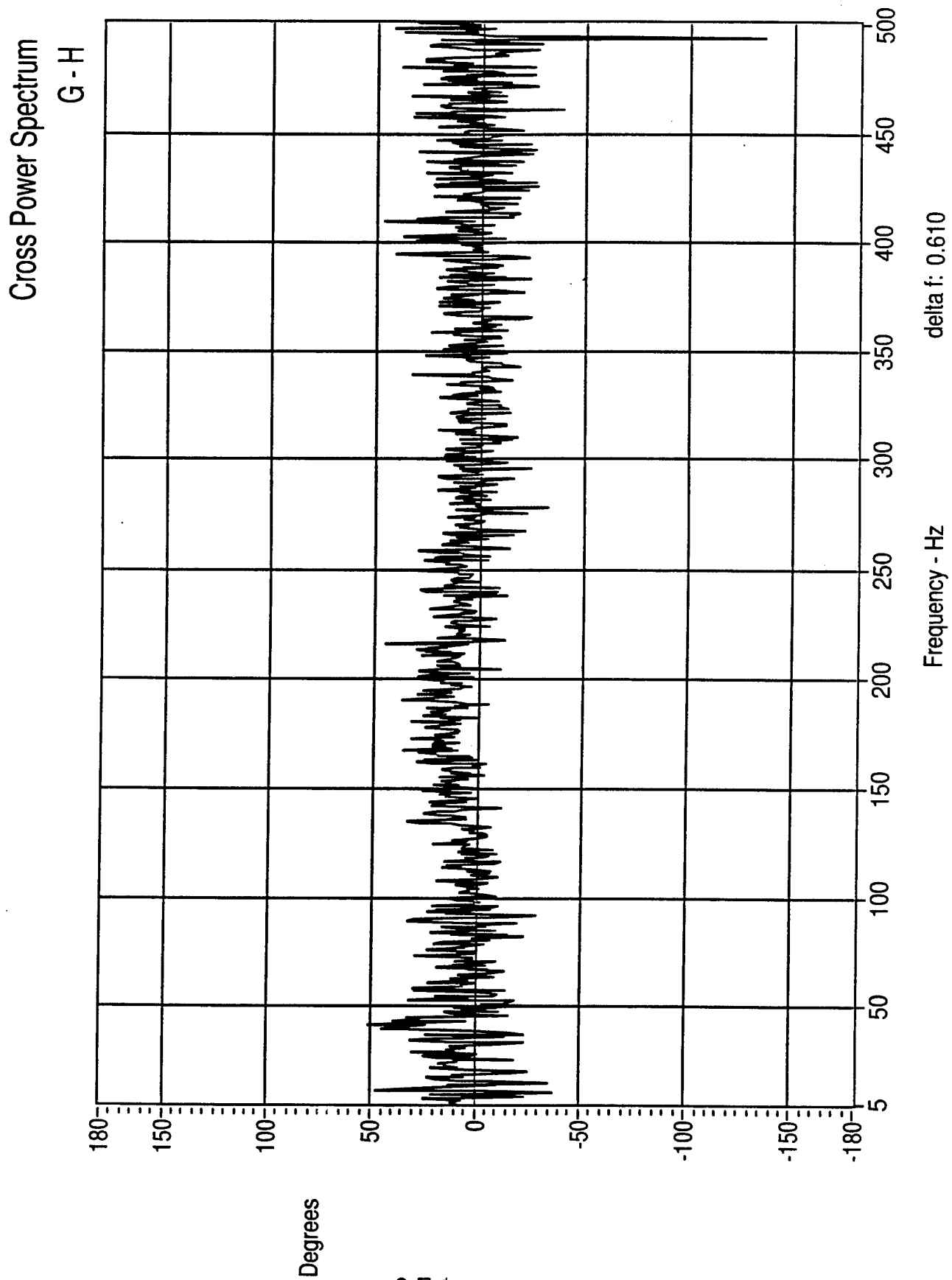
F-15 TPN\_2870: alpha=20 beta=-4 bp=0



F-15 TPN\_2872: alpha=24 beta=-4 bp=0



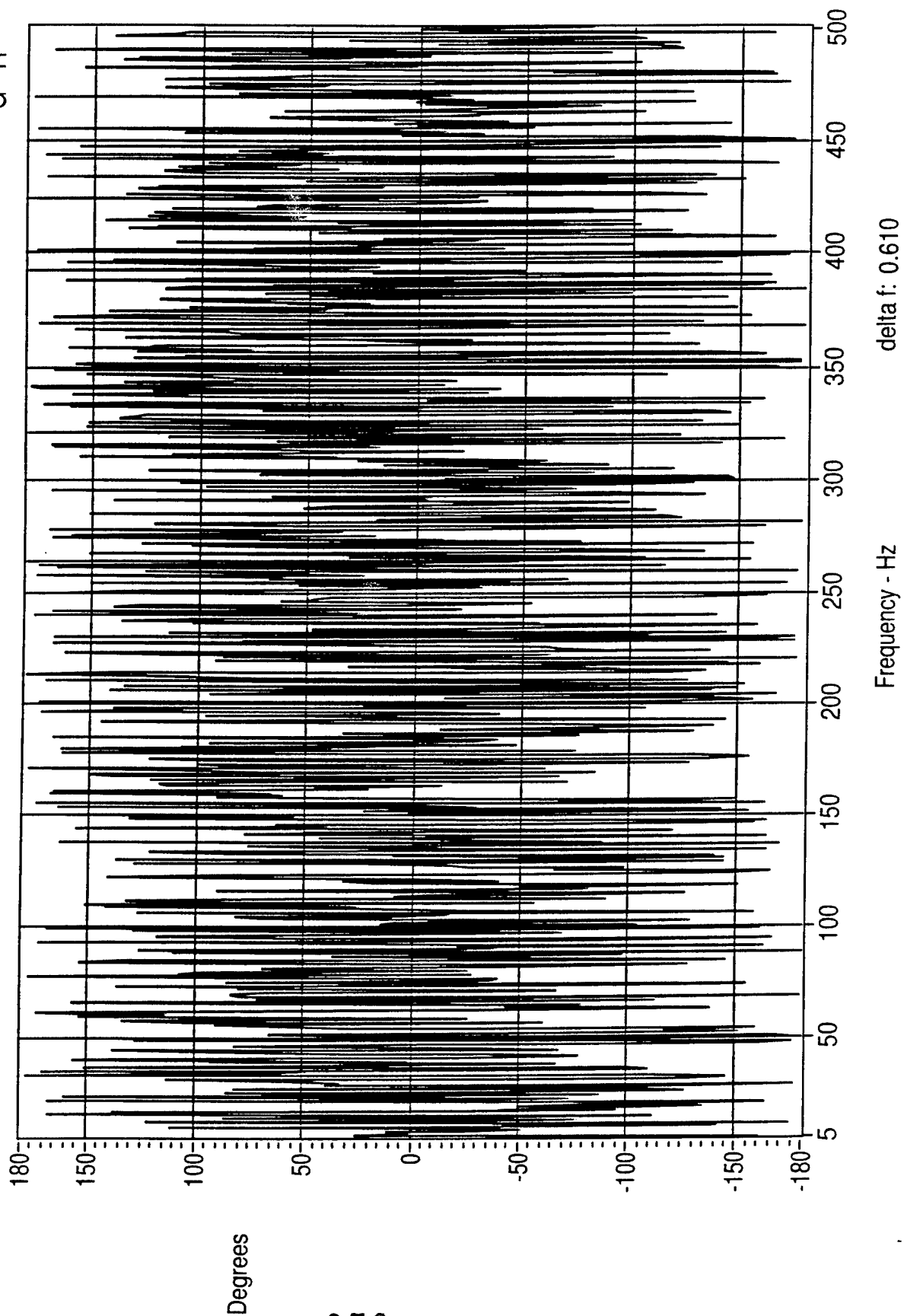
F-15 TPN\_2874: alpha=32 beta=-4 bp=0



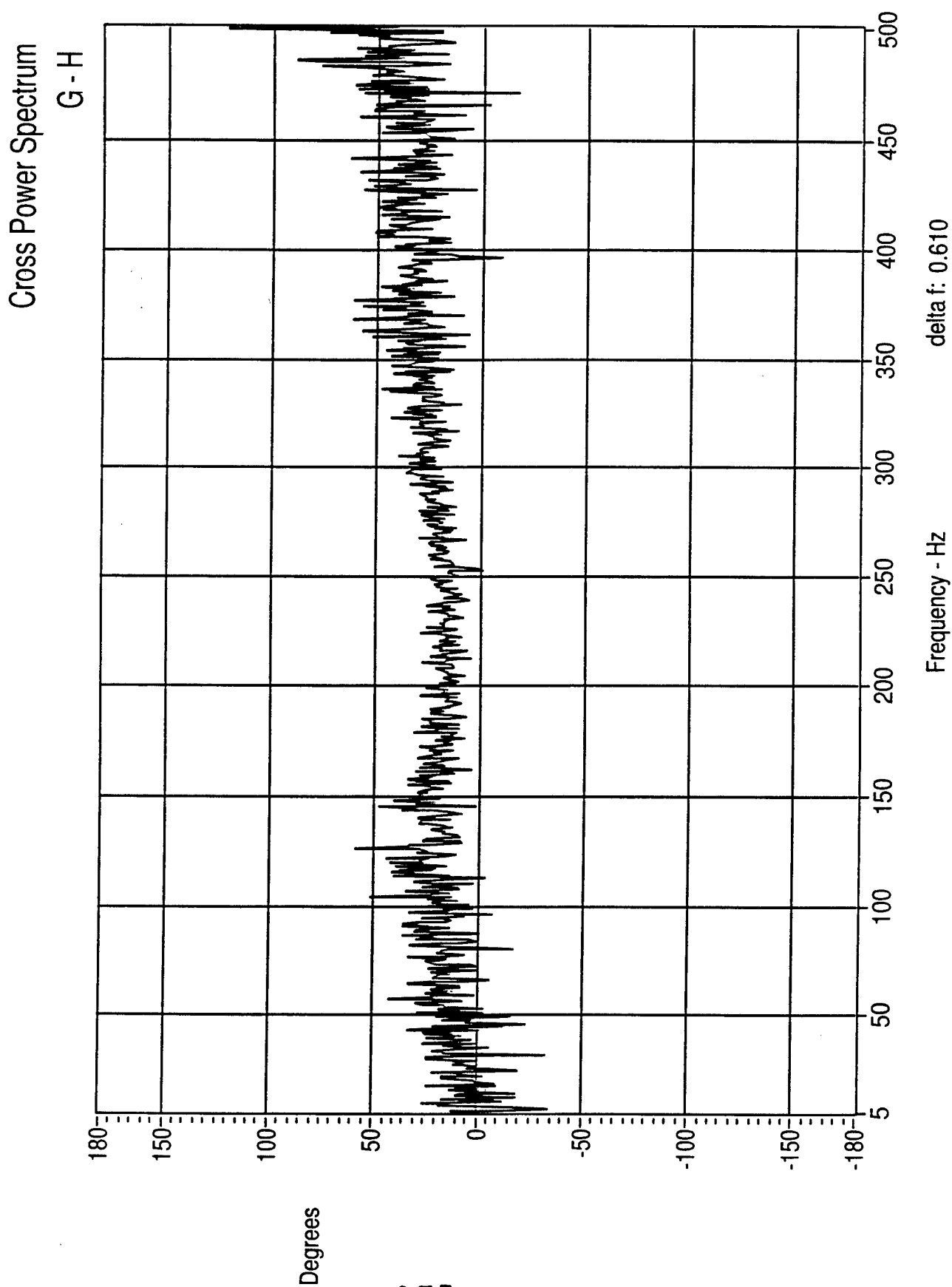
F-15 TPN\_3351: alpha=8 beta=4 bp=45

Cross Power Spectrum

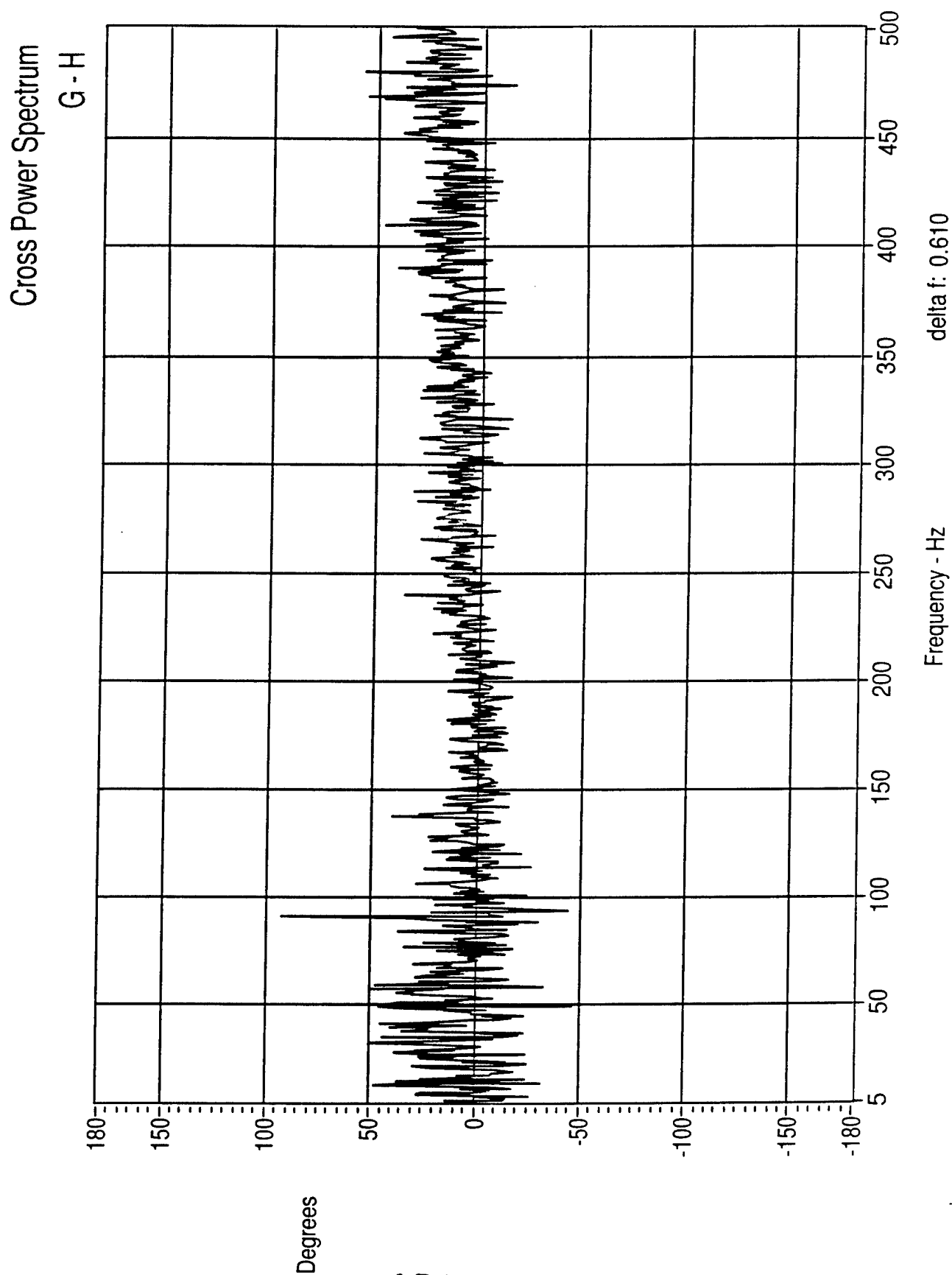
G-H



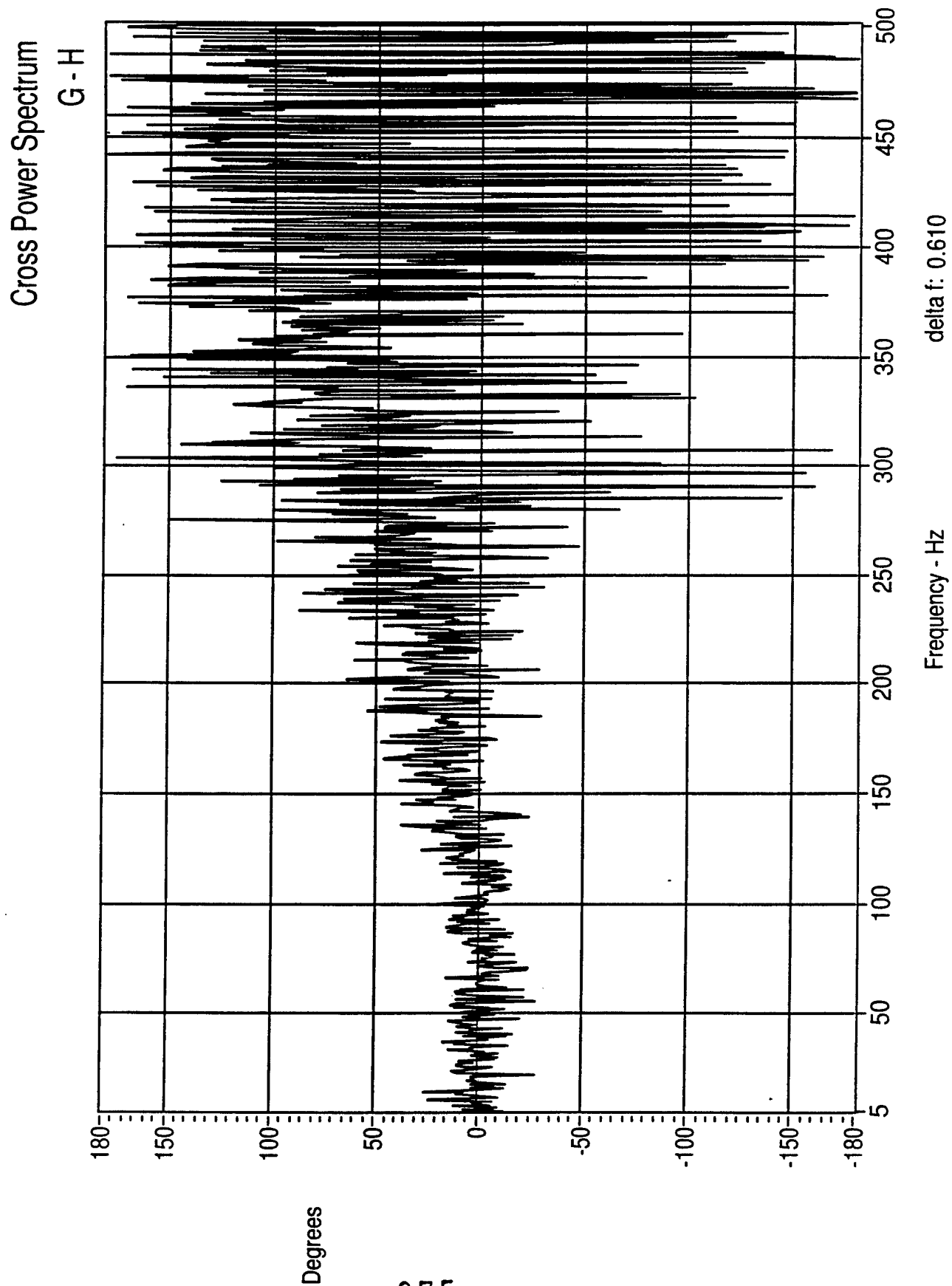
F-15 TPN\_3357: alpha=20 beta=4 bp=45



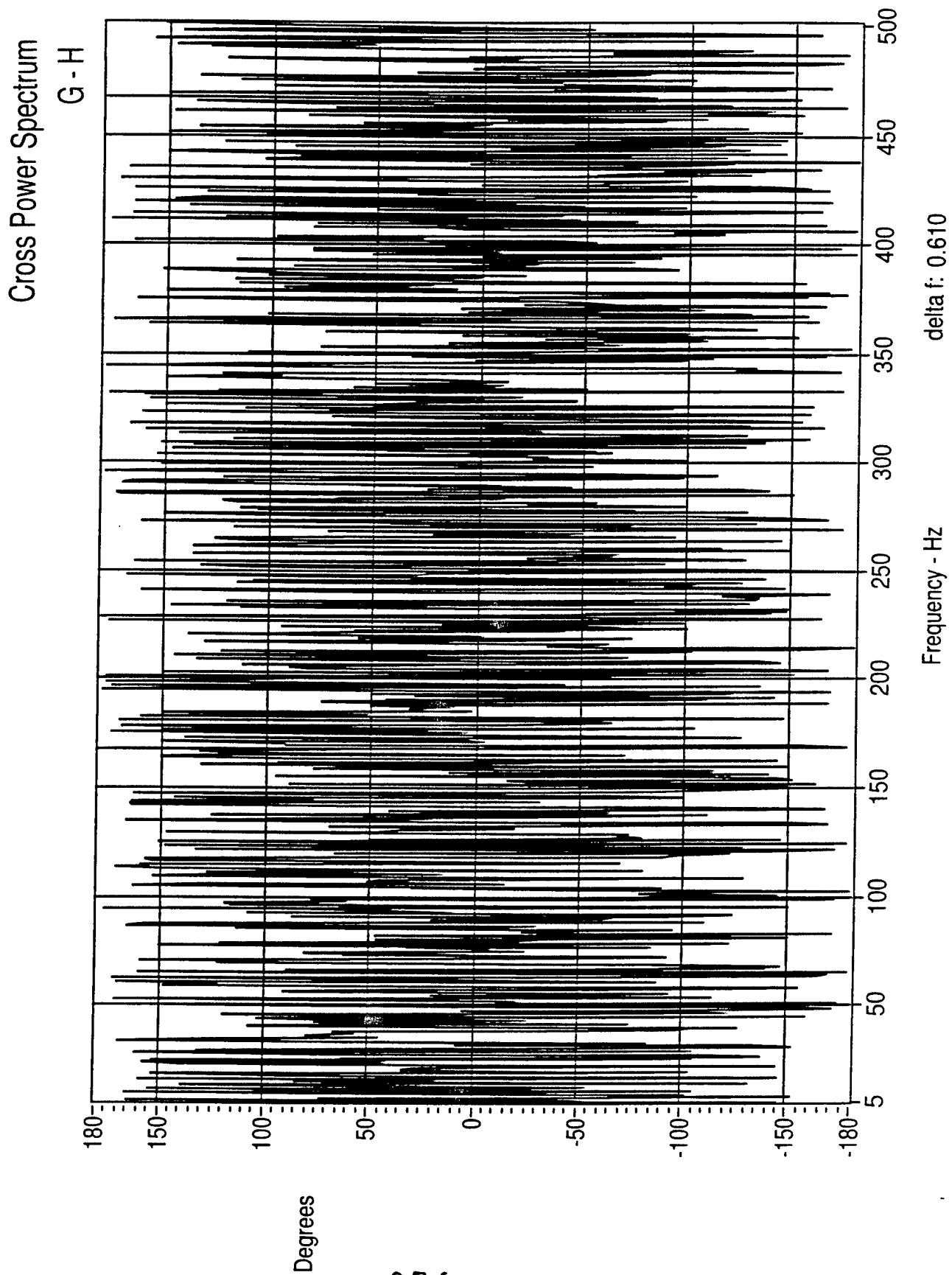
F-15 TPN\_3359: alpha=24 beta=4 bp=45



F-15 TPN\_3361: alpha=32 beta=4 bp=45

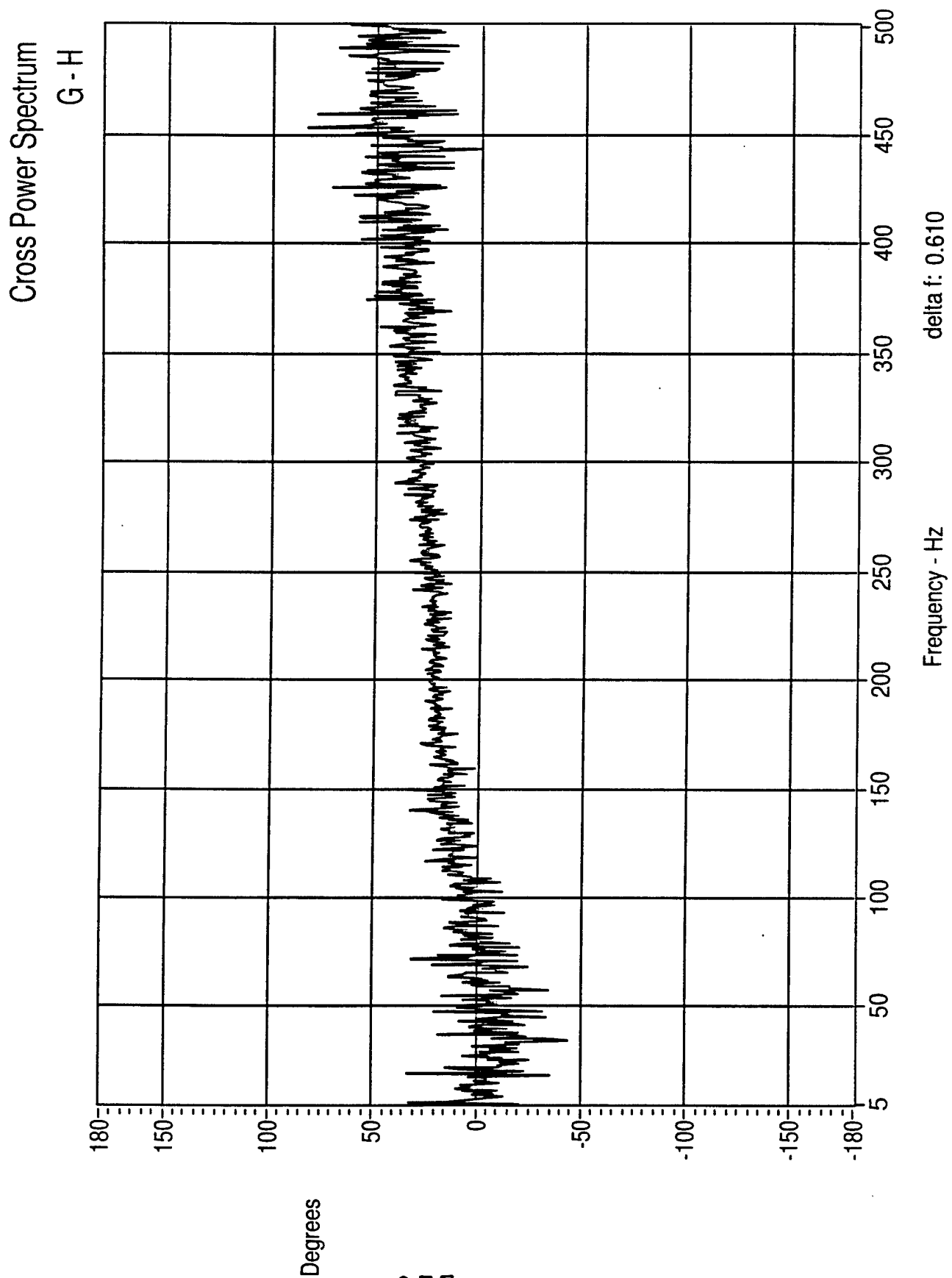


F-15 TPN\_3333: alpha=8 beta=0 bp=45

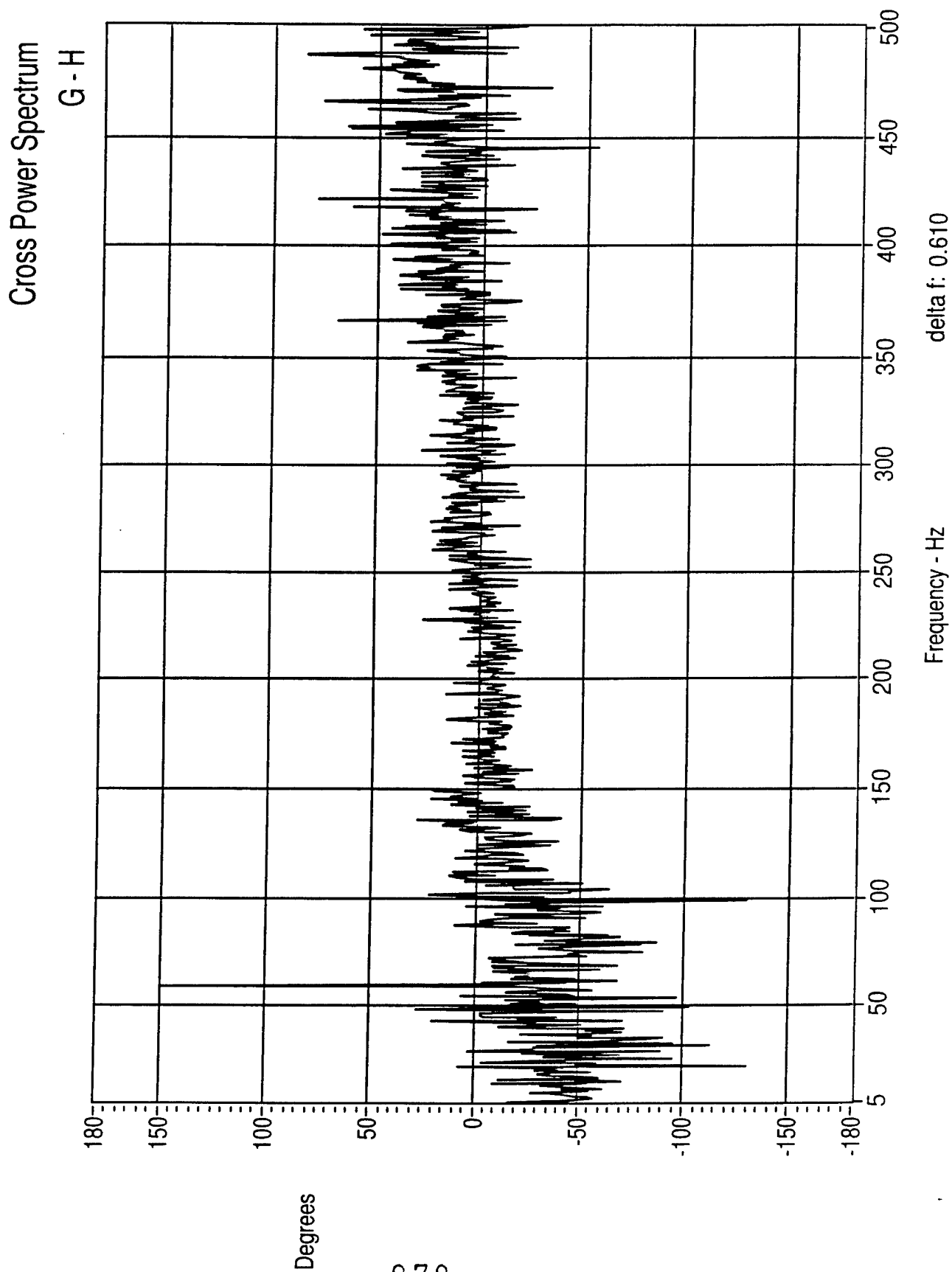




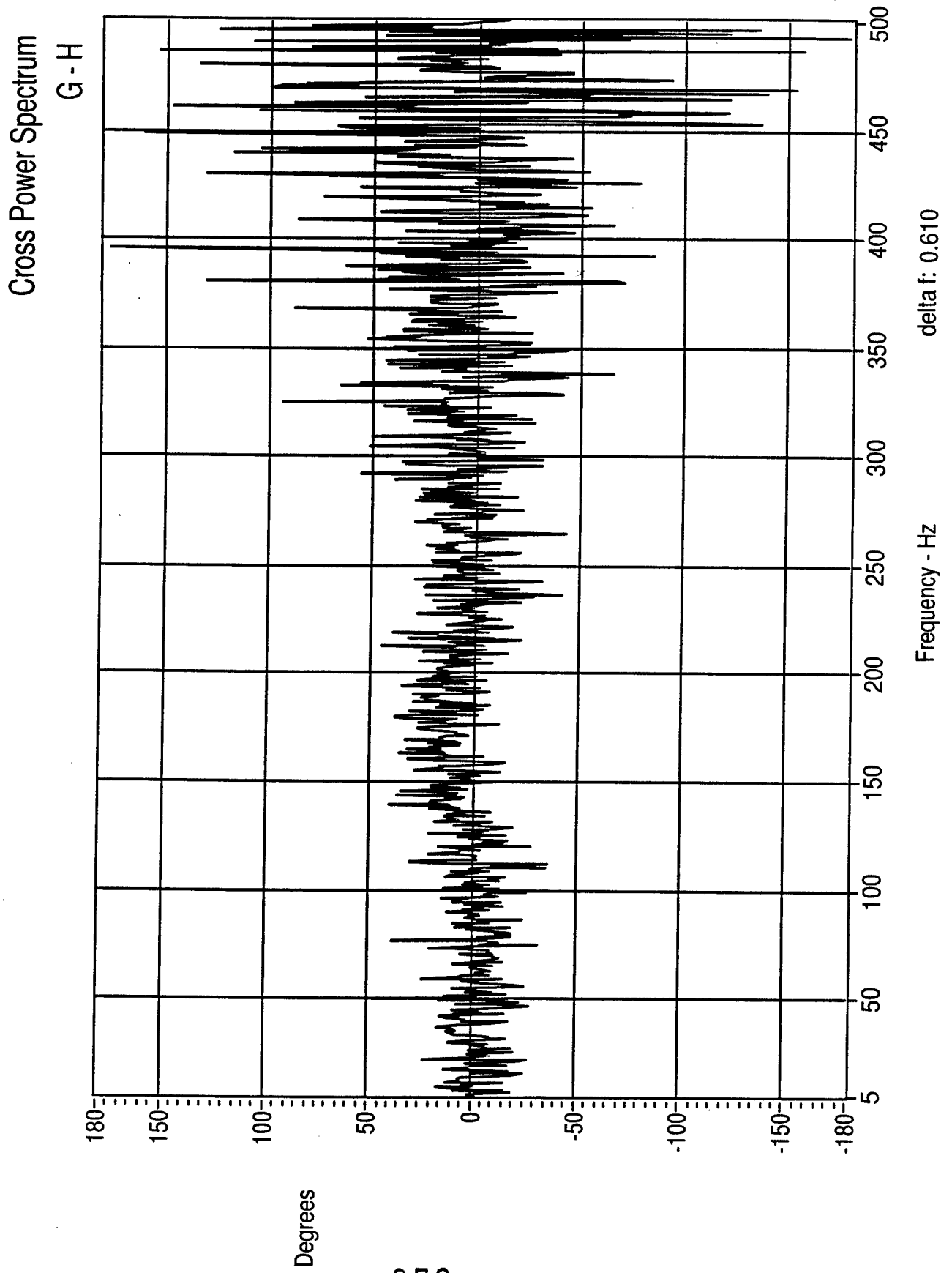
F-15 TPN\_3339: alpha=20 beta=0 bp=45



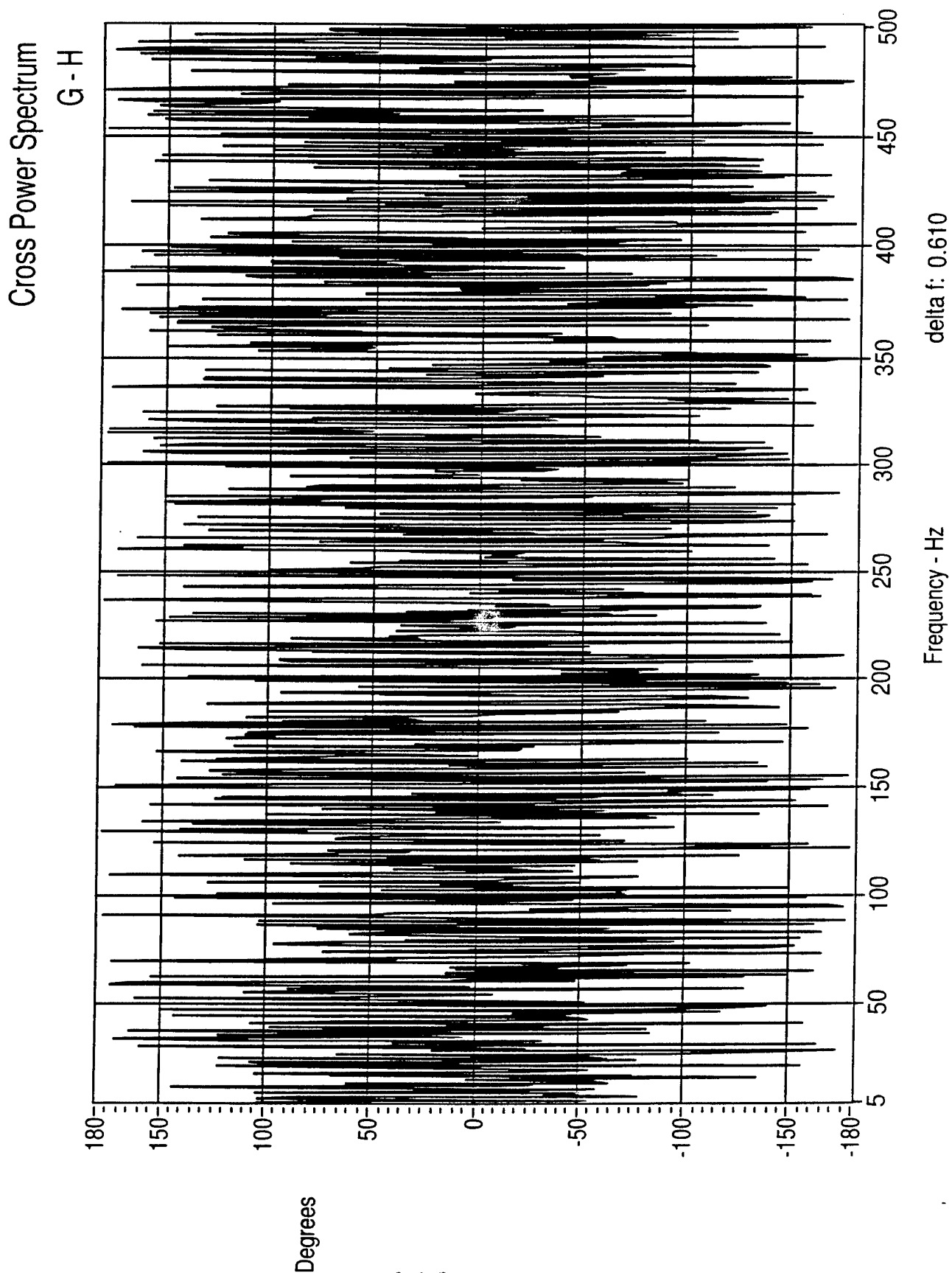
F-15 TPN\_3341: alpha=24 beta=0 bp=45



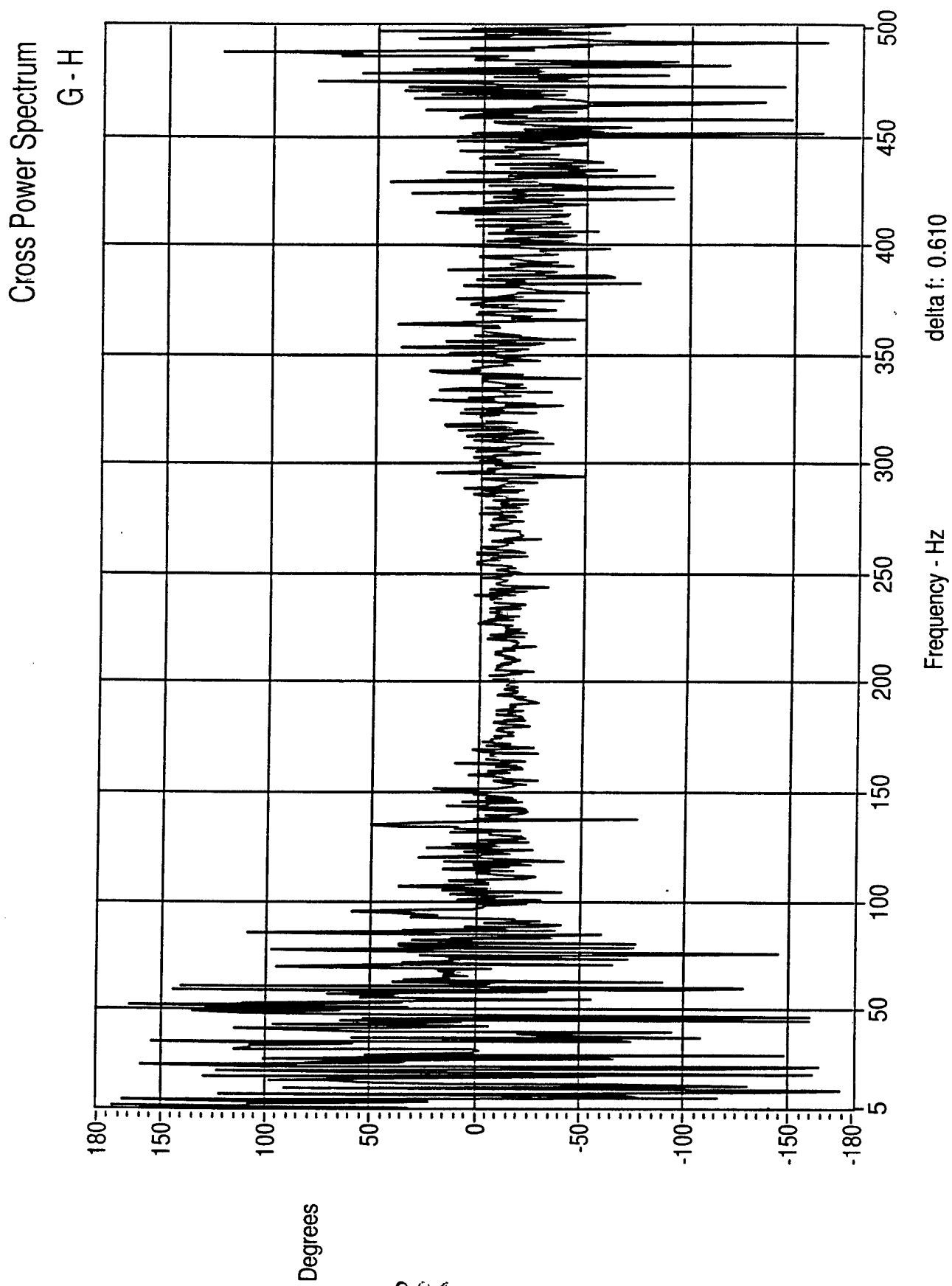
F-15 TPN\_3343: alpha=32 beta=0 bp=45



F-15 TPN\_3369: alpha=8 beta=-4 bp=45



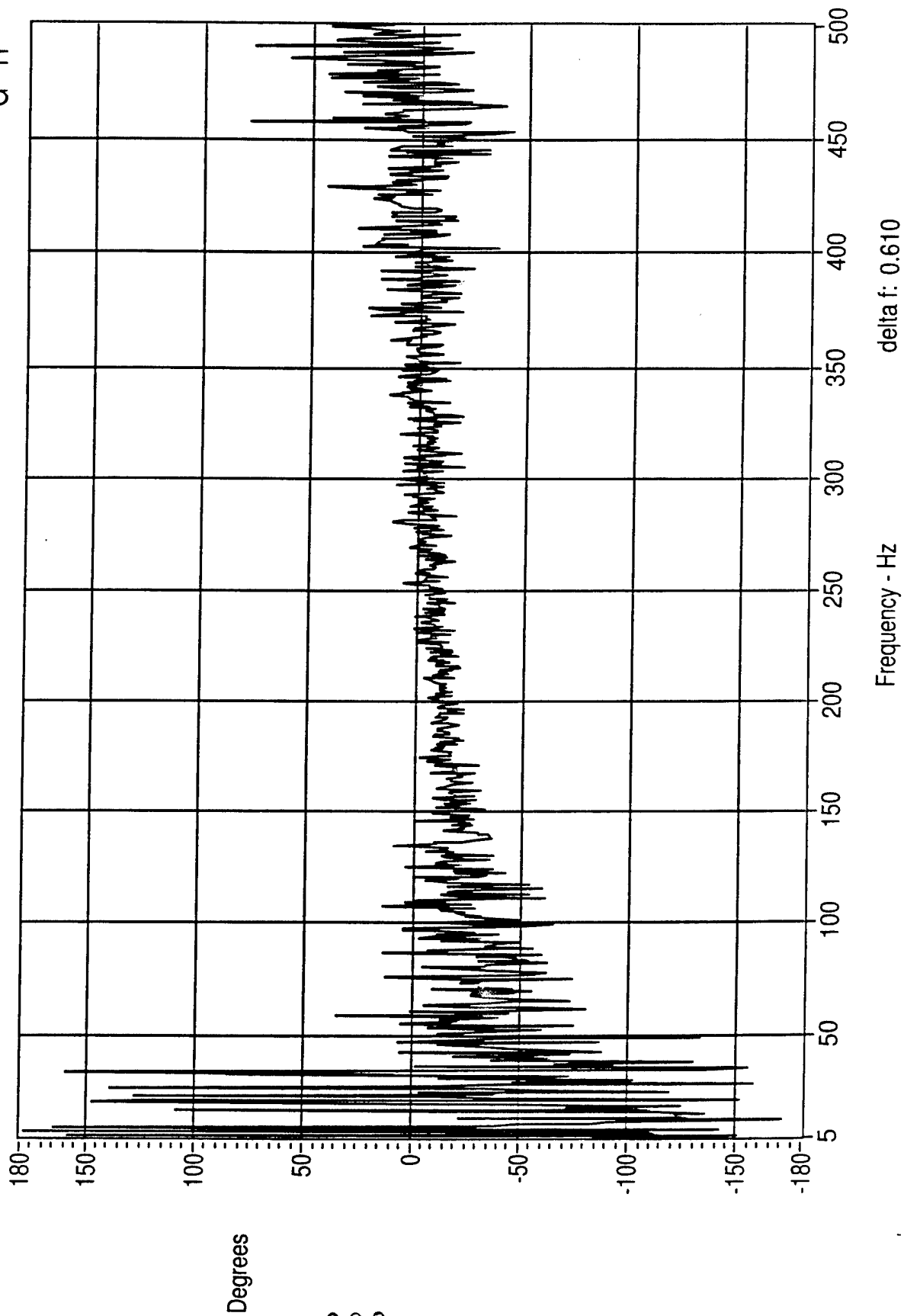
F-15 TPN\_3375: alpha=20 beta=-4 bp=45



F-15 TPN\_3377: alpha=24 beta=-4 bp=45

# Cross Power Spectrum

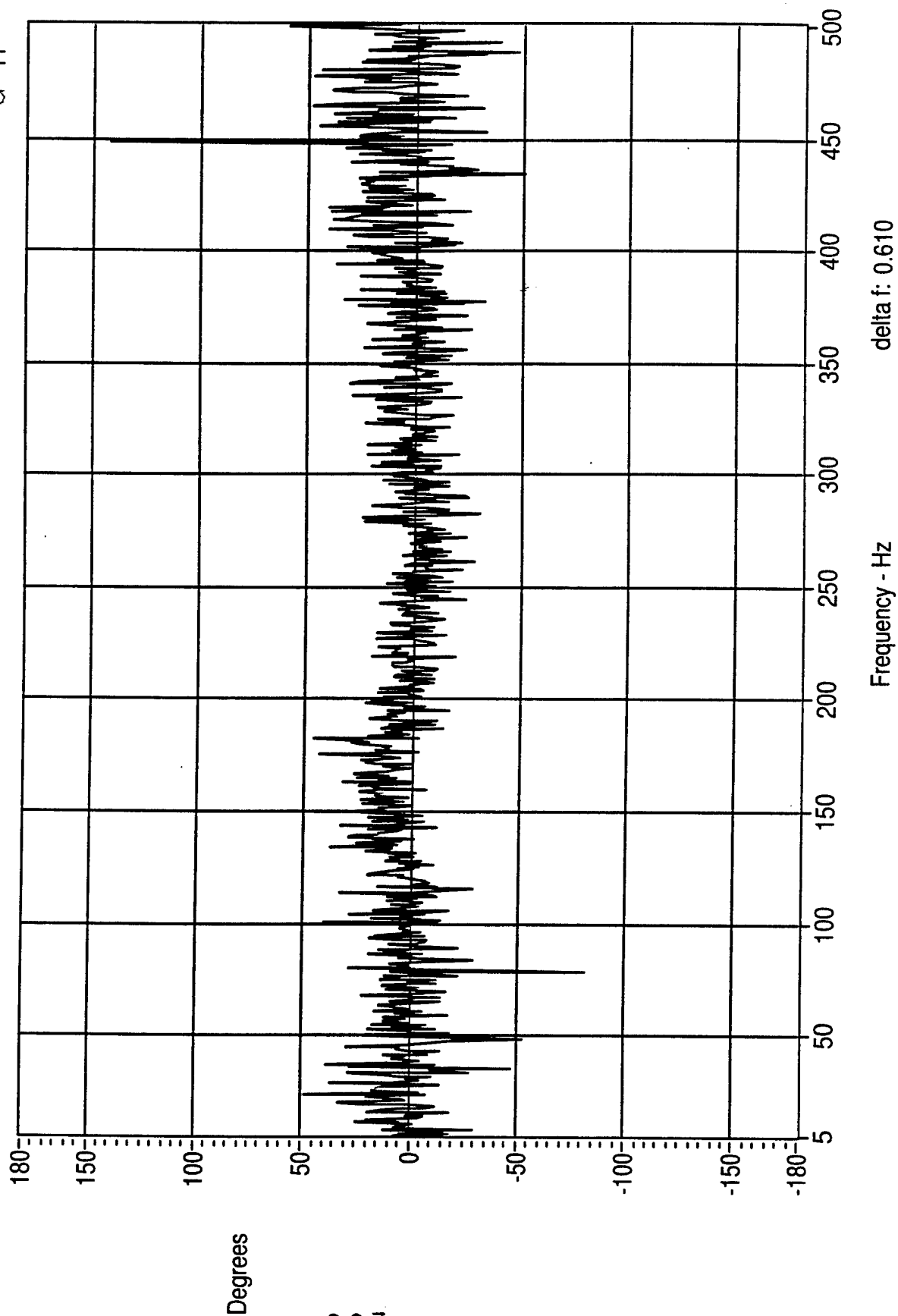
G - H



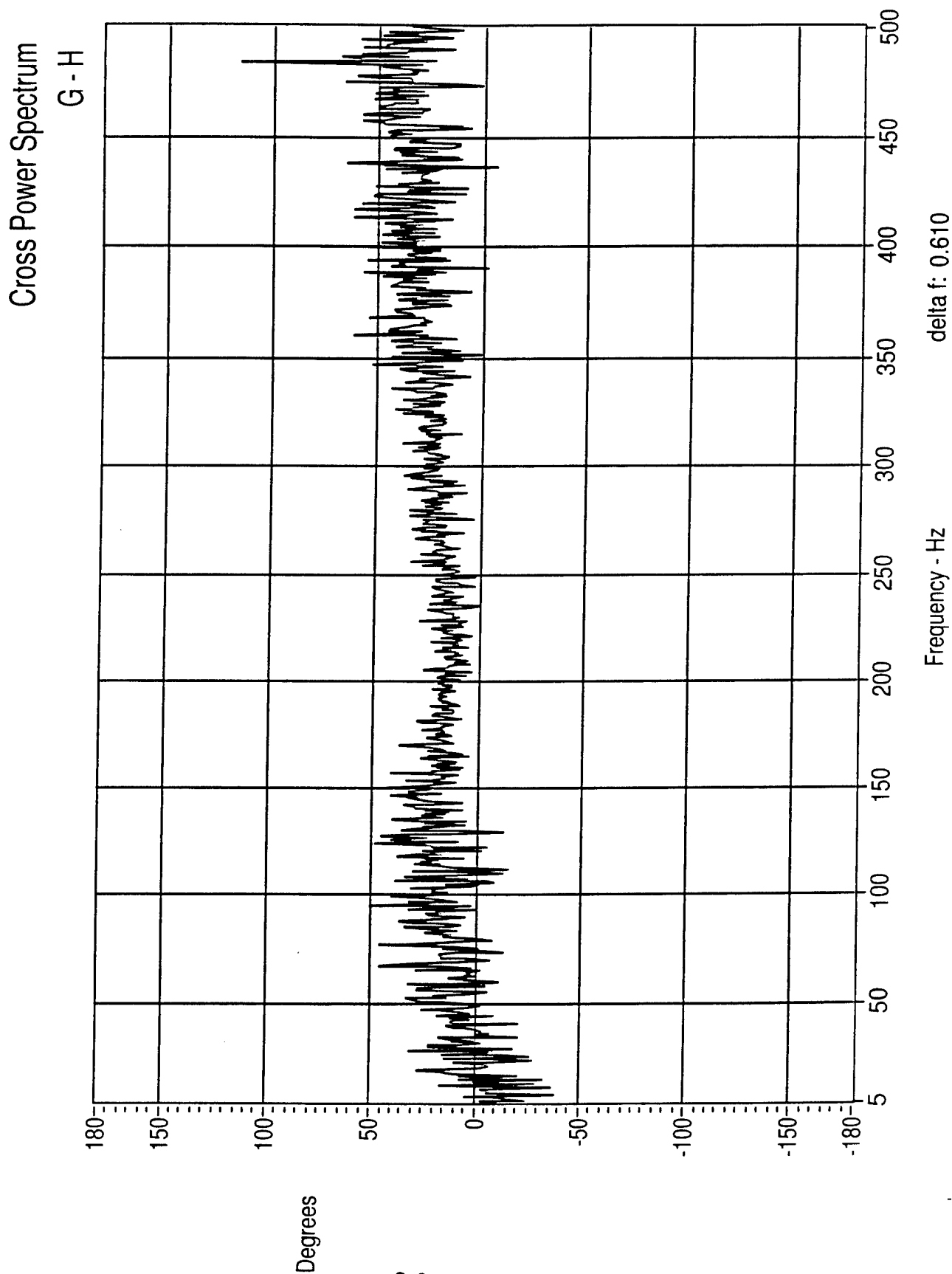
F-15 TPN\_3379: alpha=32 beta=-4 bp=45

Cross Power Spectrum

G - H



F-15 TPN\_3046: alpha=20 beta=4 bp=65

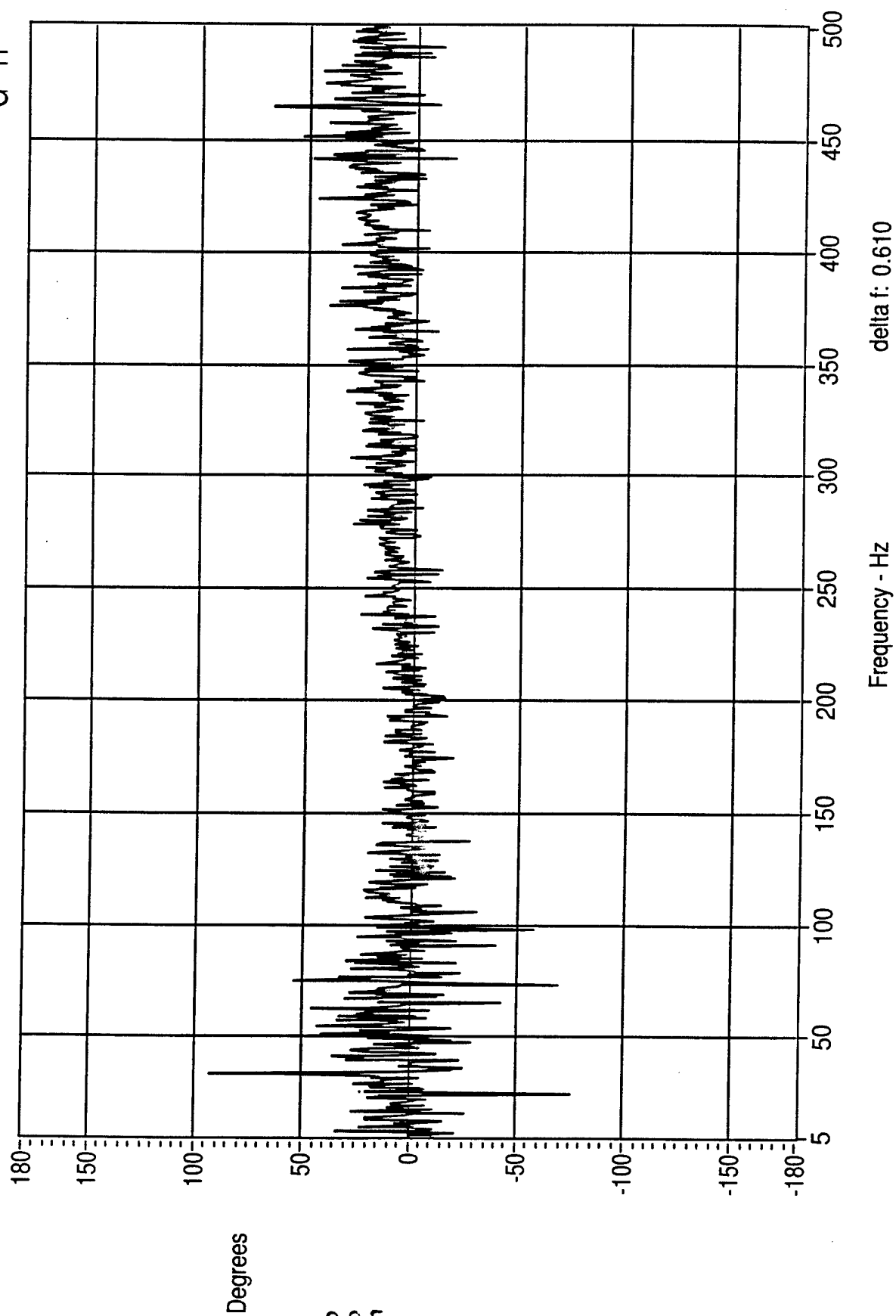




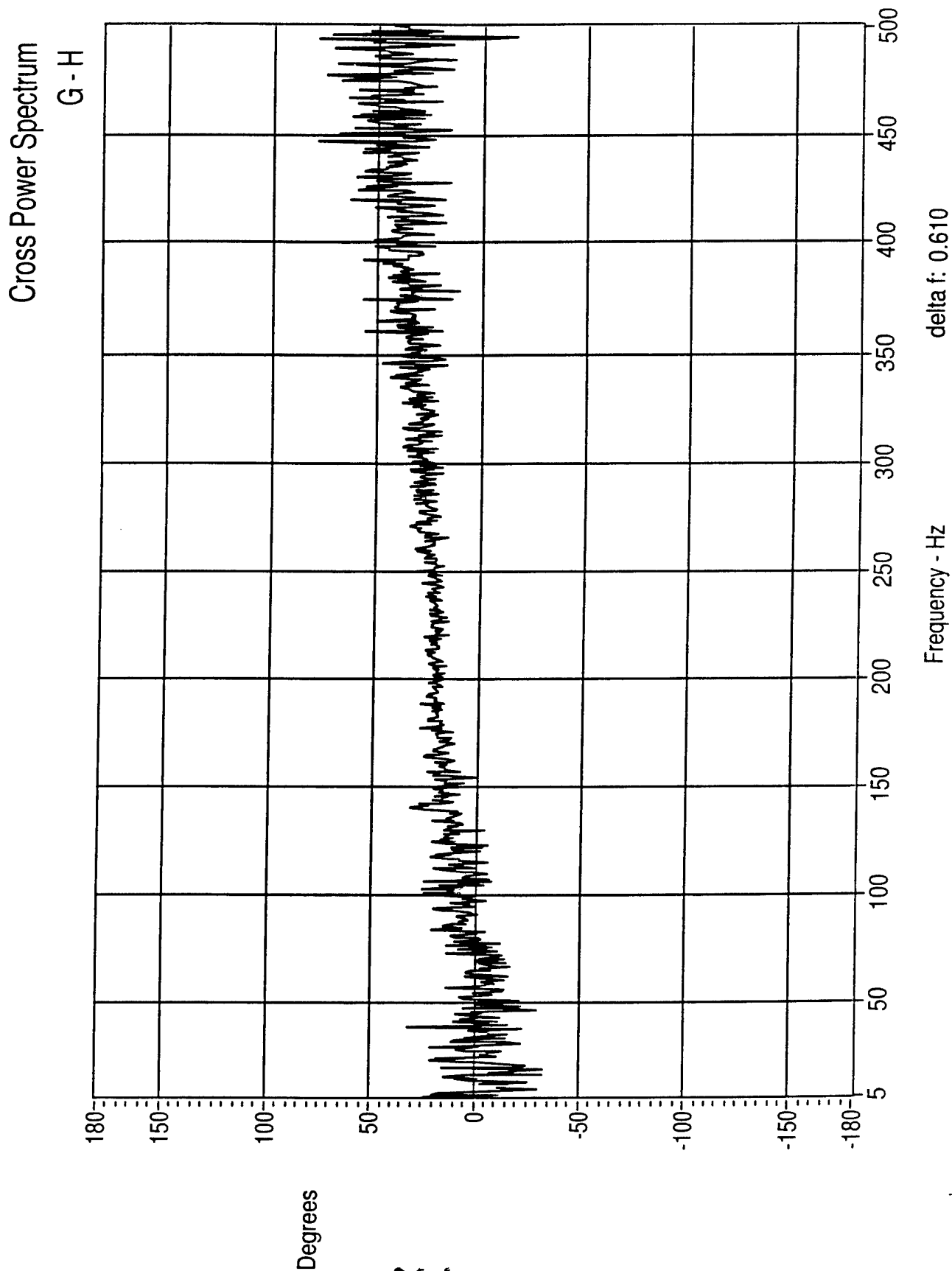
F-15 TPN\_3048: alpha=24 beta=4 bp=65

# Cross Power Spectrum

G - H



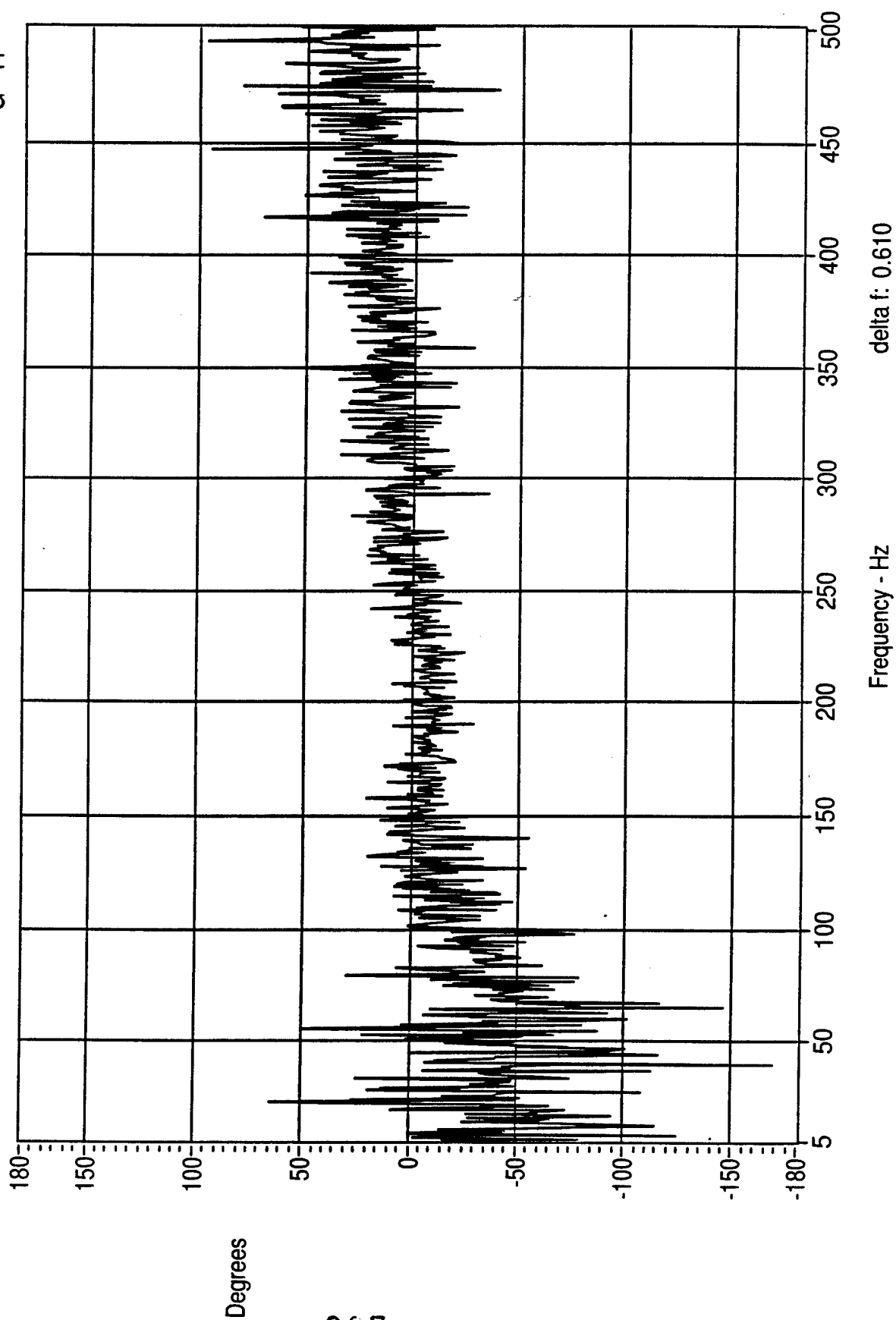
F-15 TPN\_3040: alpha=20 beta=0 bp=65



F-15 TPN\_3042: alpha=24 beta=0 bp=65

Cross Power Spectrum

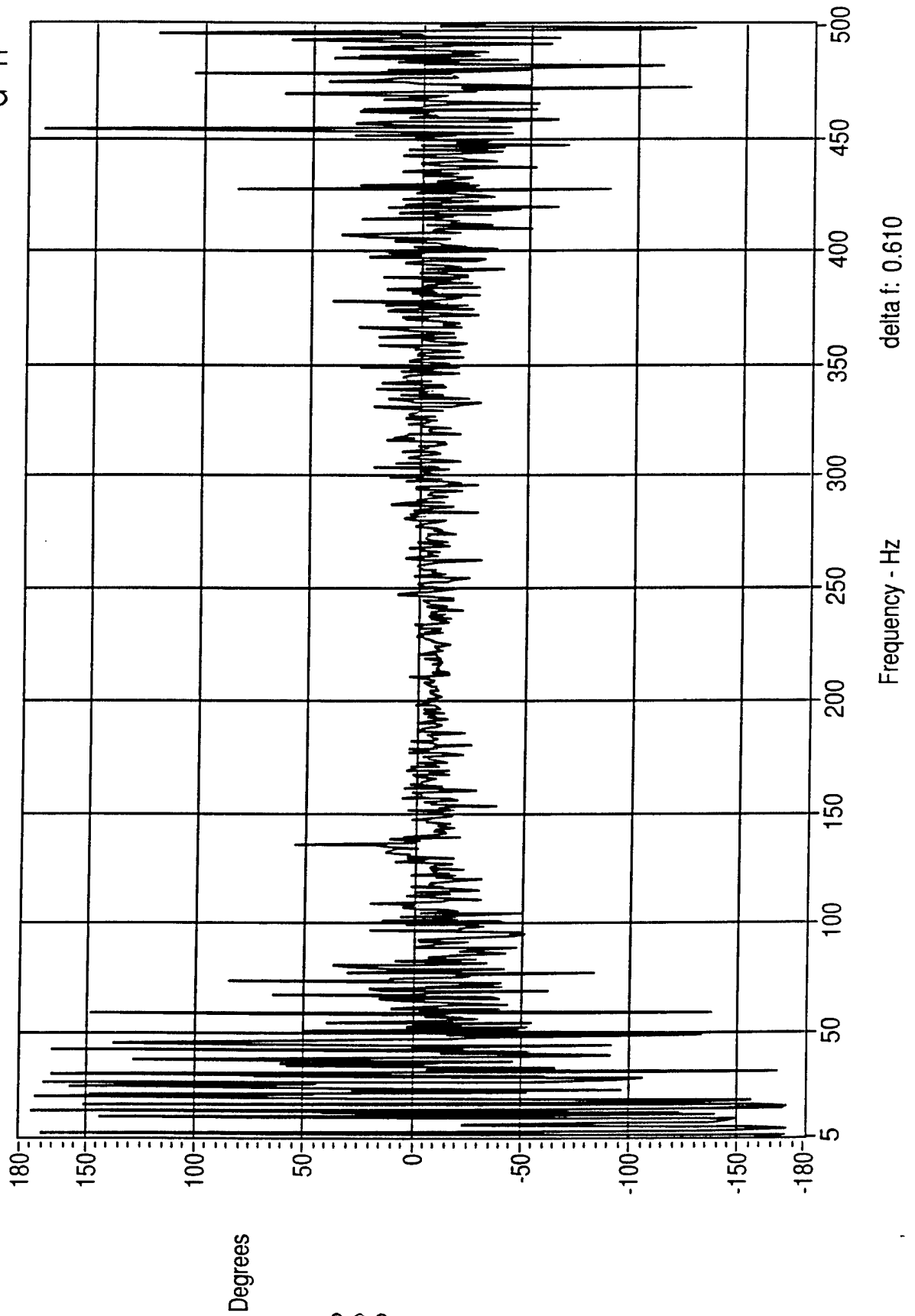
G - H



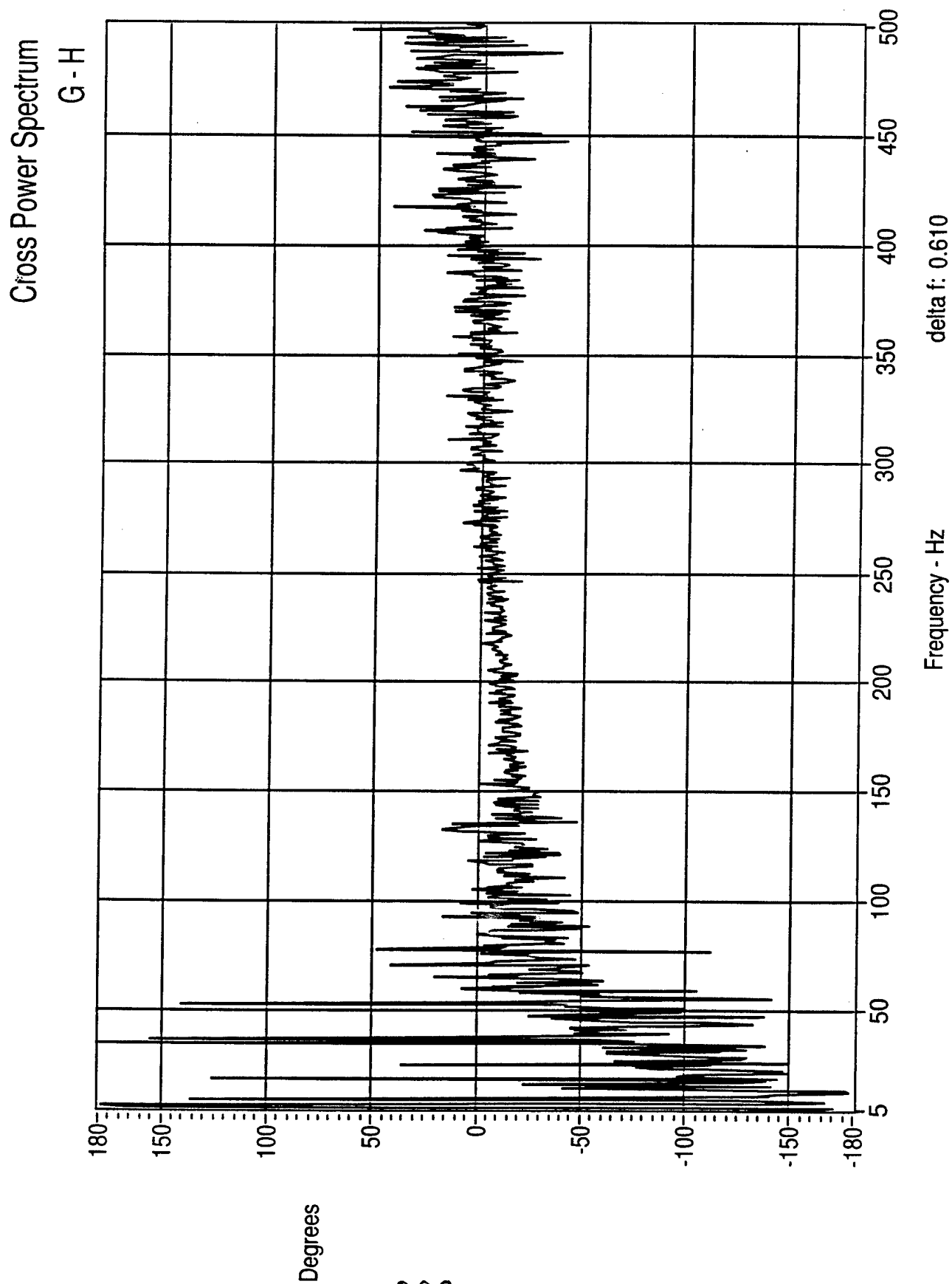
F-15 TPN\_3034: alpha=20 beta=-4 bp=65

# Cross Power Spectrum

G - H



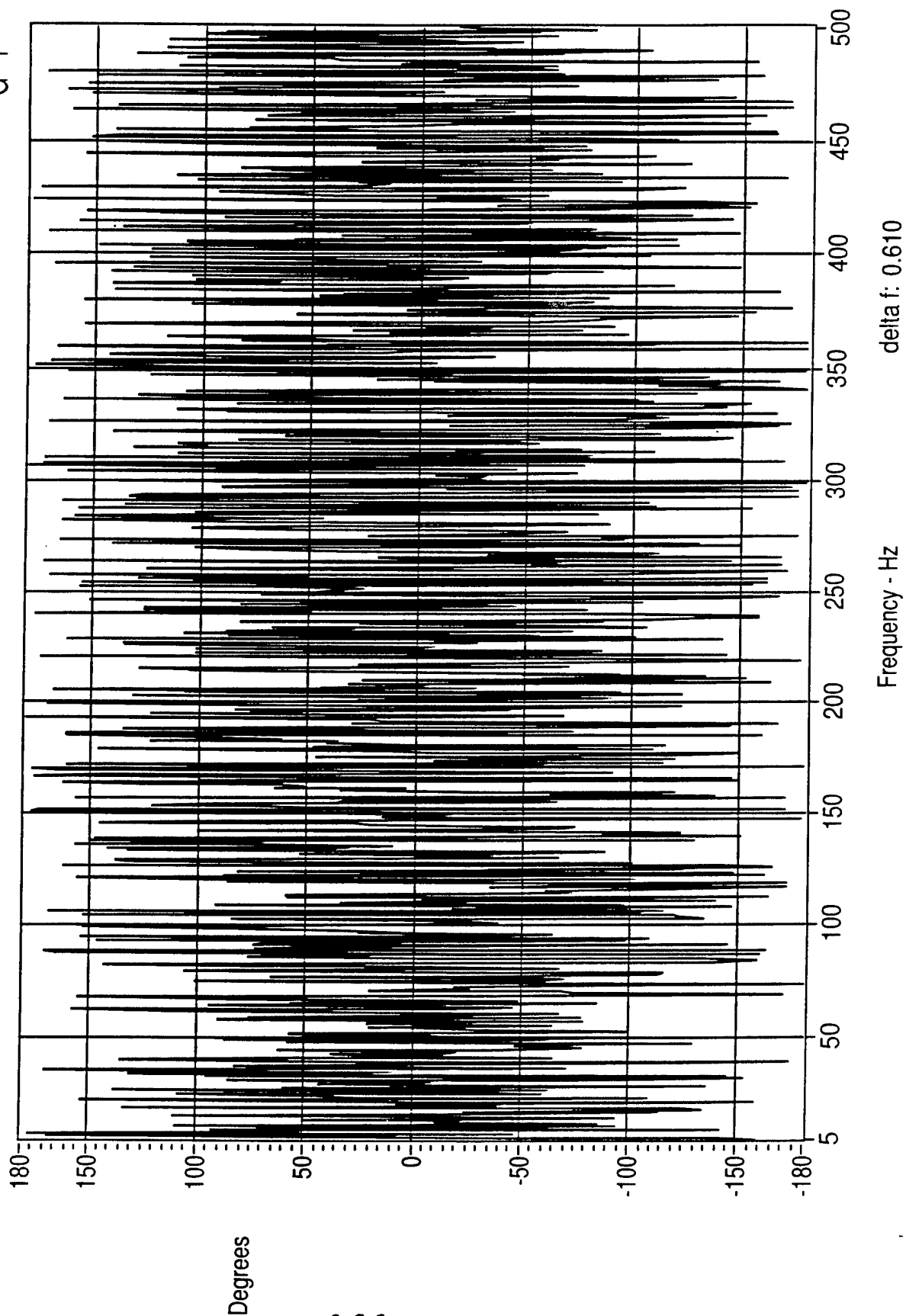
F-15 TPN\_3036: alpha=24 beta=-4 bp=65



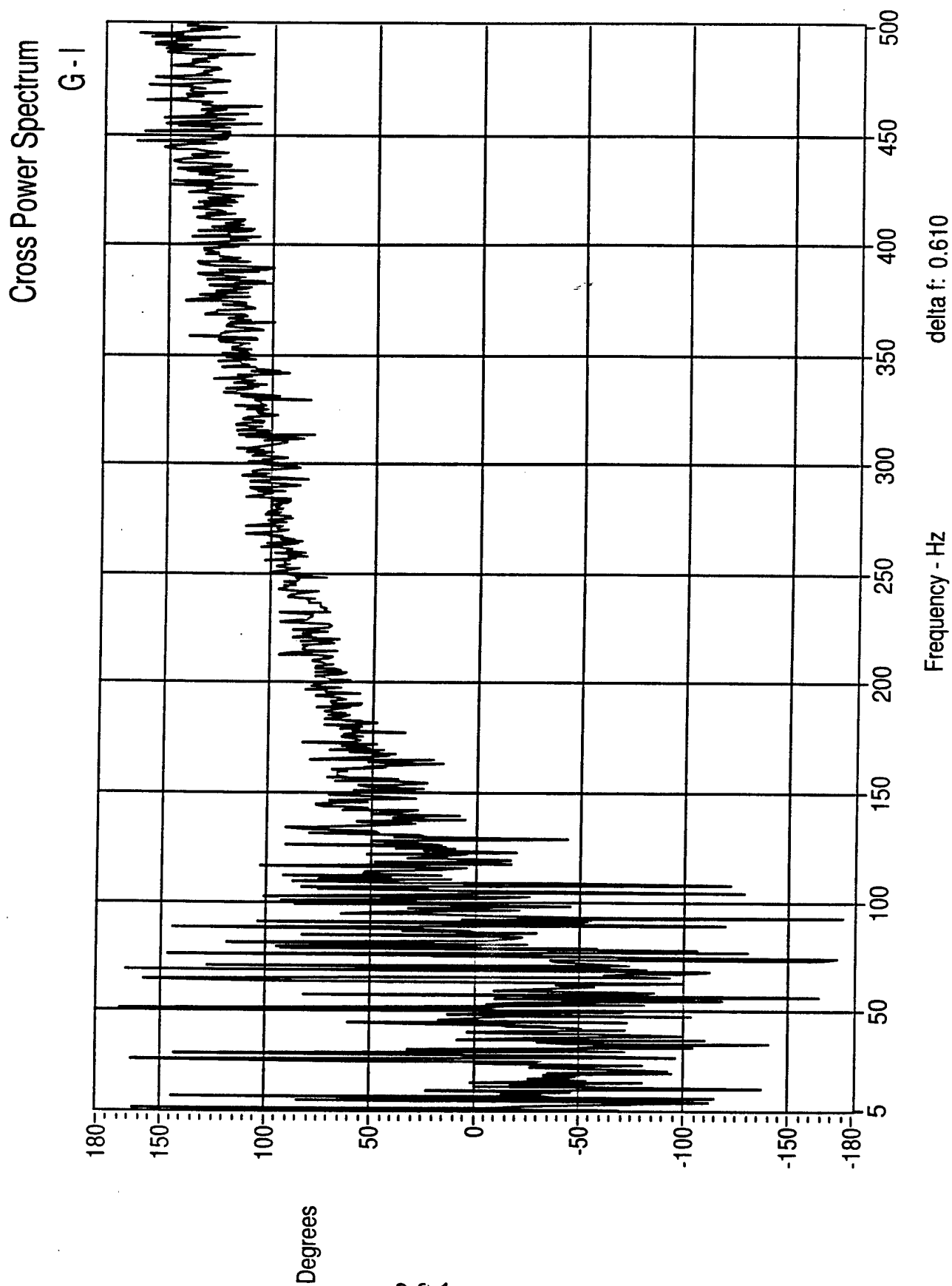
F-15 TPN\_2918:  $\alpha=8$   $\beta=4$   $\text{bp}=0$

Cross Power Spectrum

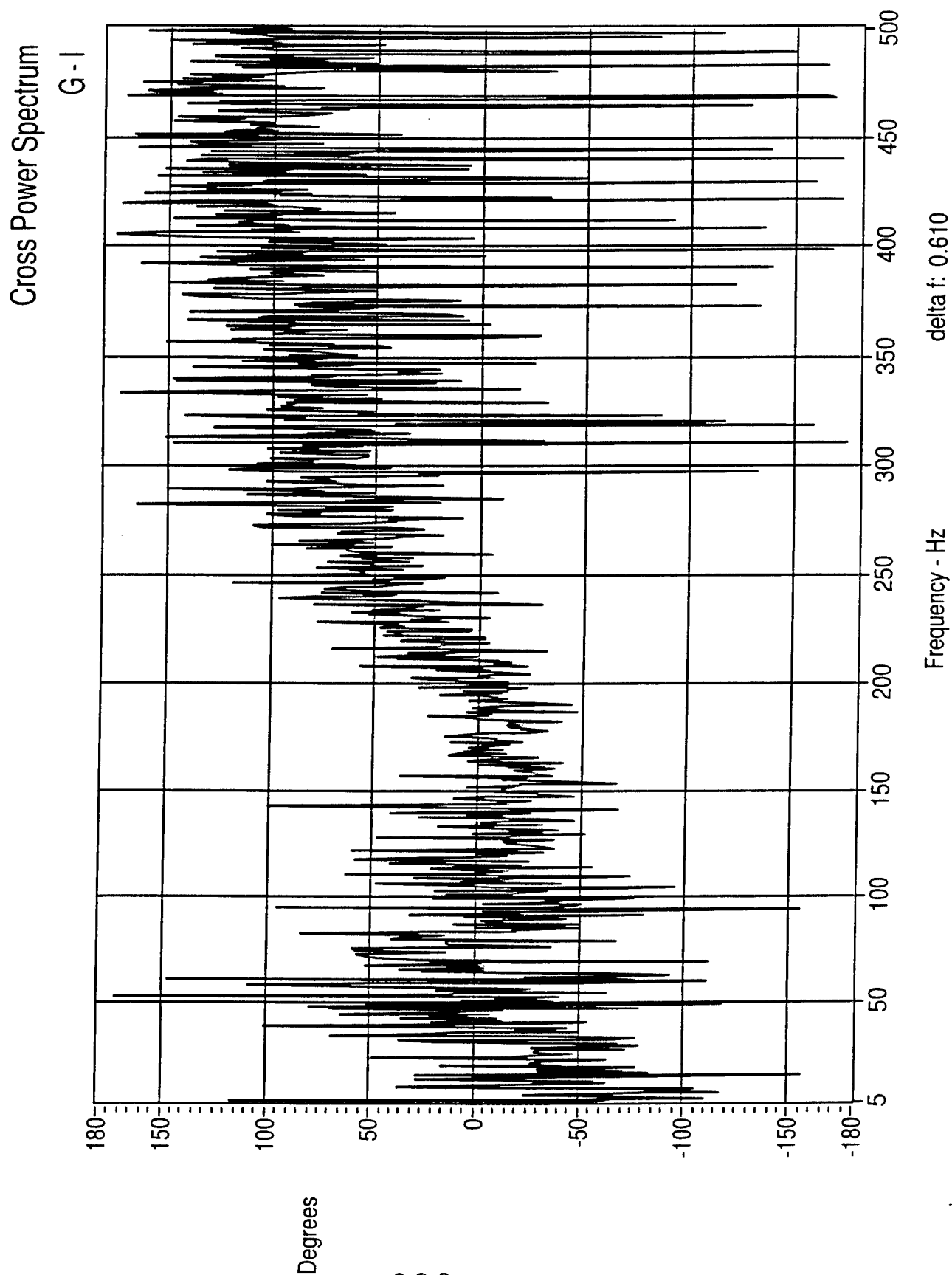
G-I



F-15 TPN\_2924: alpha=20 beta=4 bp=0

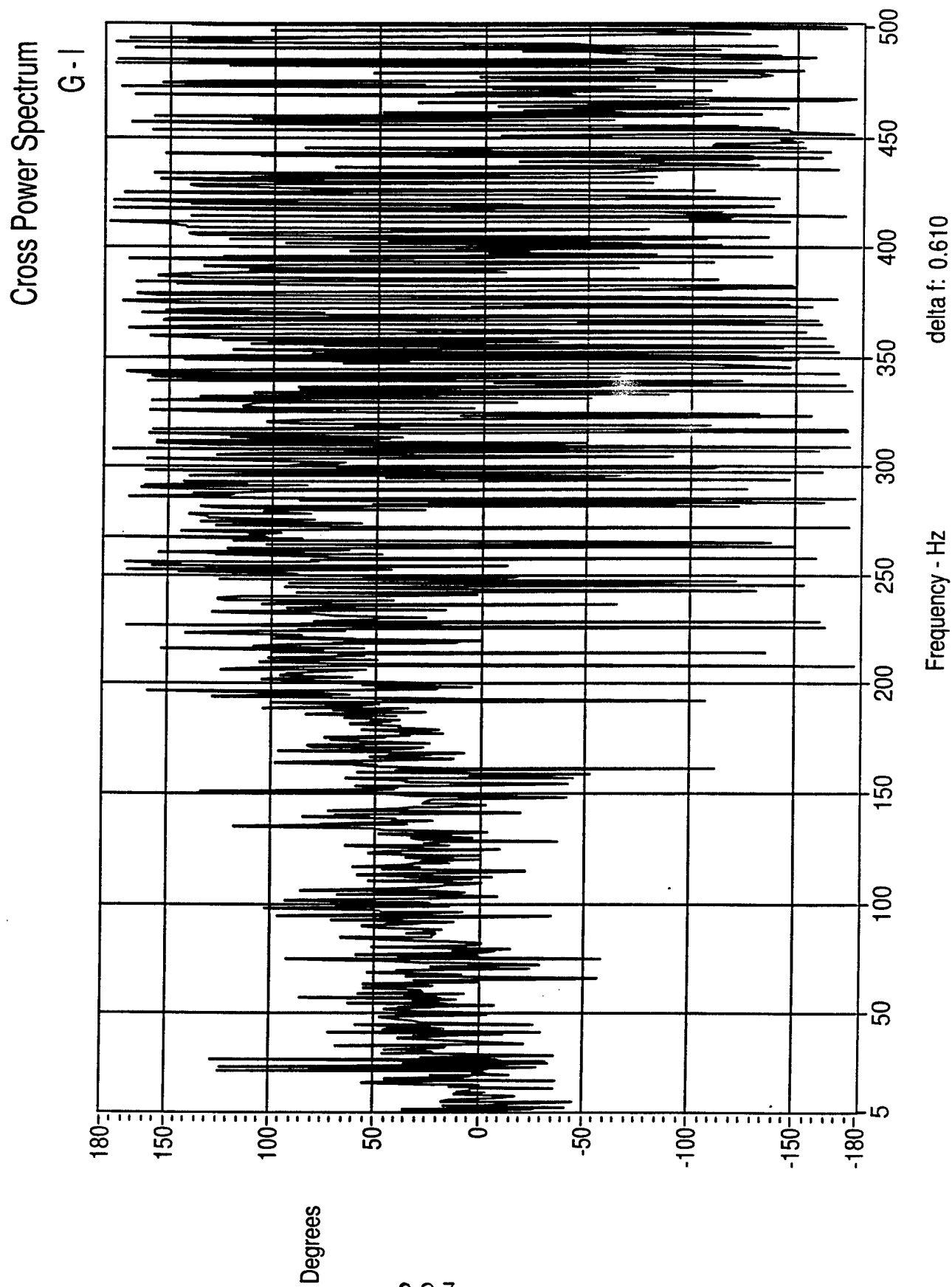


F-15 TPN\_2926: alpha=24 beta=4 bp=0

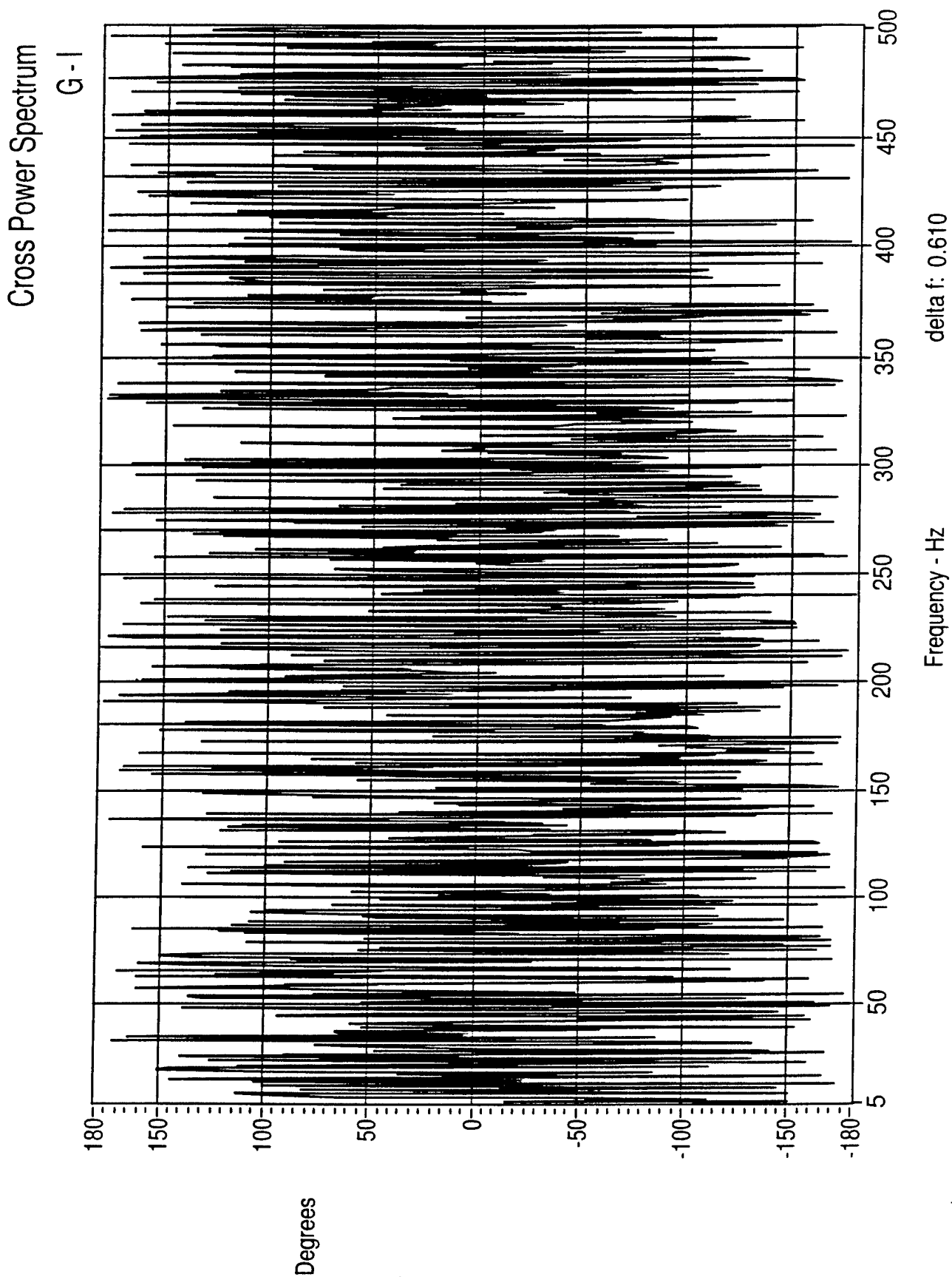




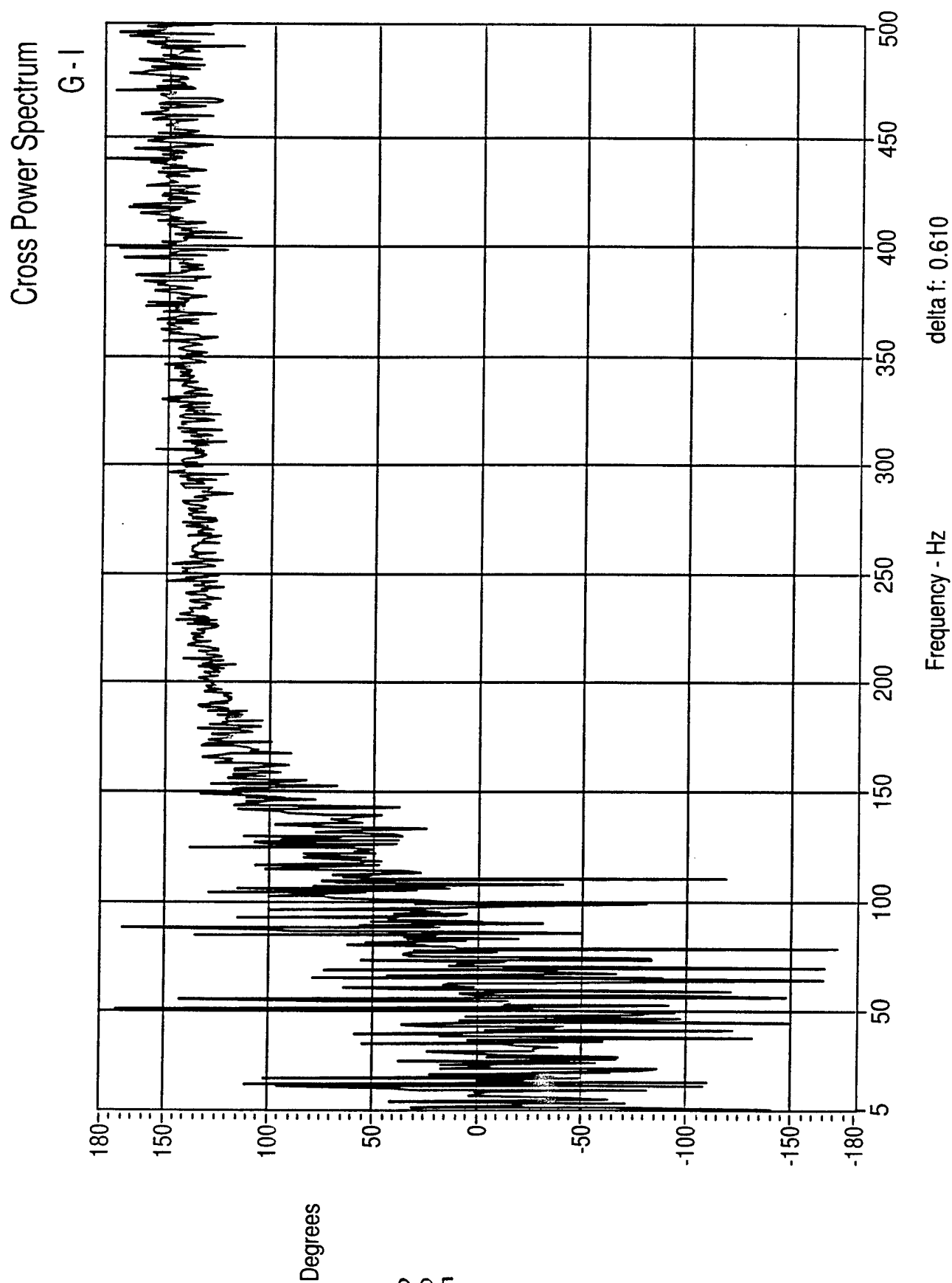
F-15 TPN\_2928: alpha=32 beta=4 bp=0



F-15 TPN\_2844: alpha=8 beta=0 bp=0



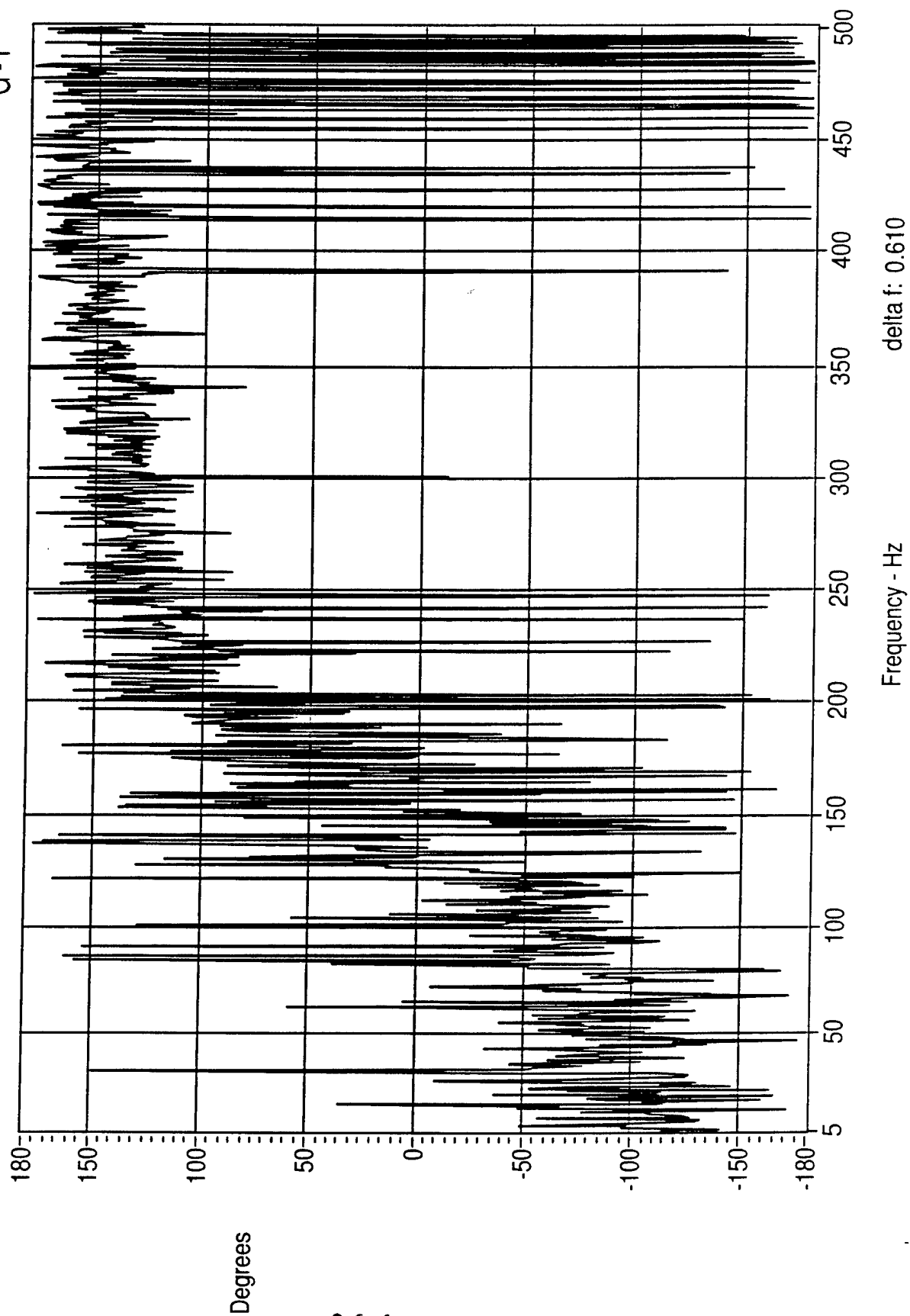
F-15 TPN\_2850: alpha=20 beta=0 bp=0



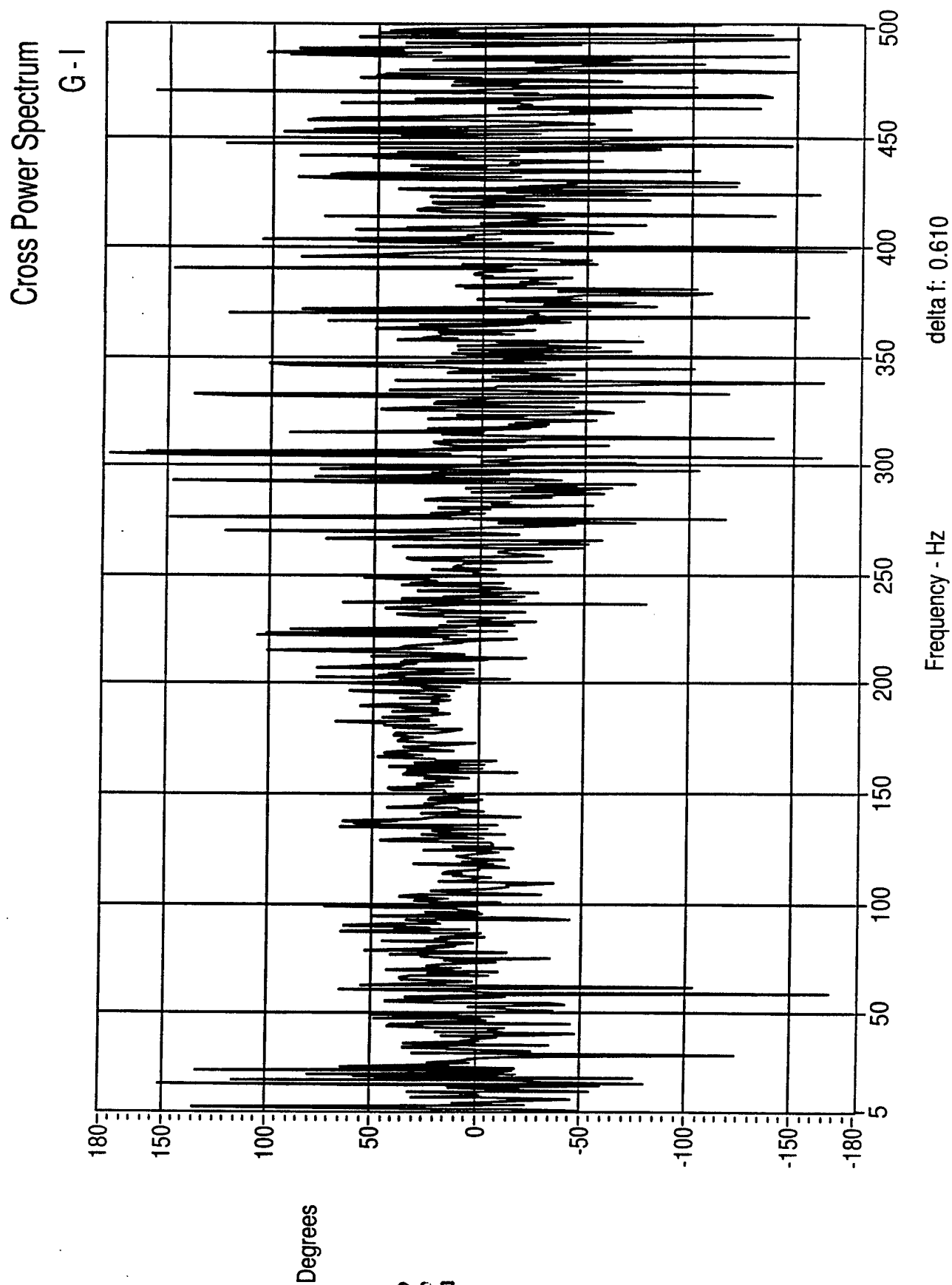
F-15 TPN\_2852: alpha=24 beta=0 bp=0

# Cross Power Spectrum

G-I



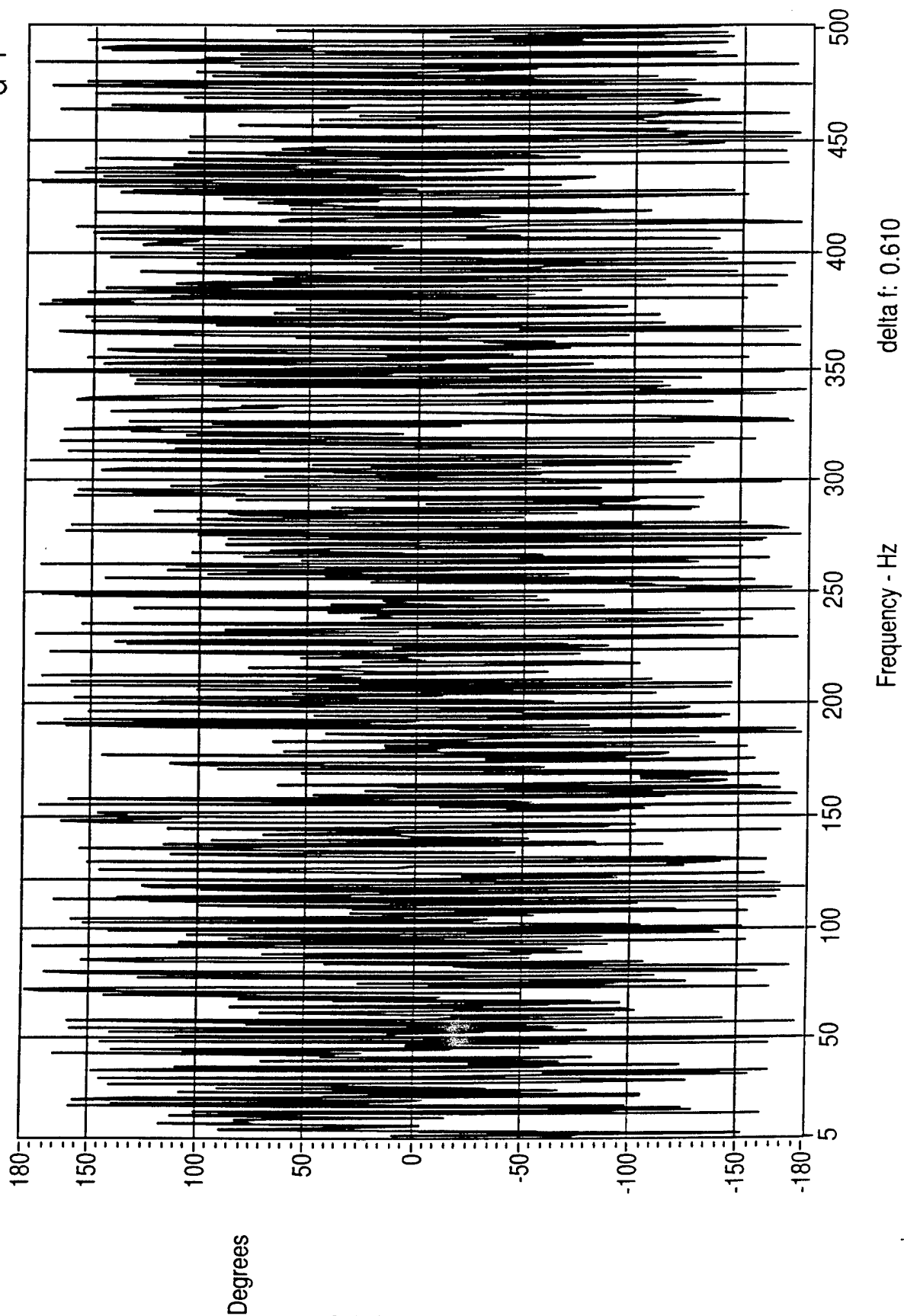
F-15 TPN\_2854: alpha=32 beta=0 bp=0



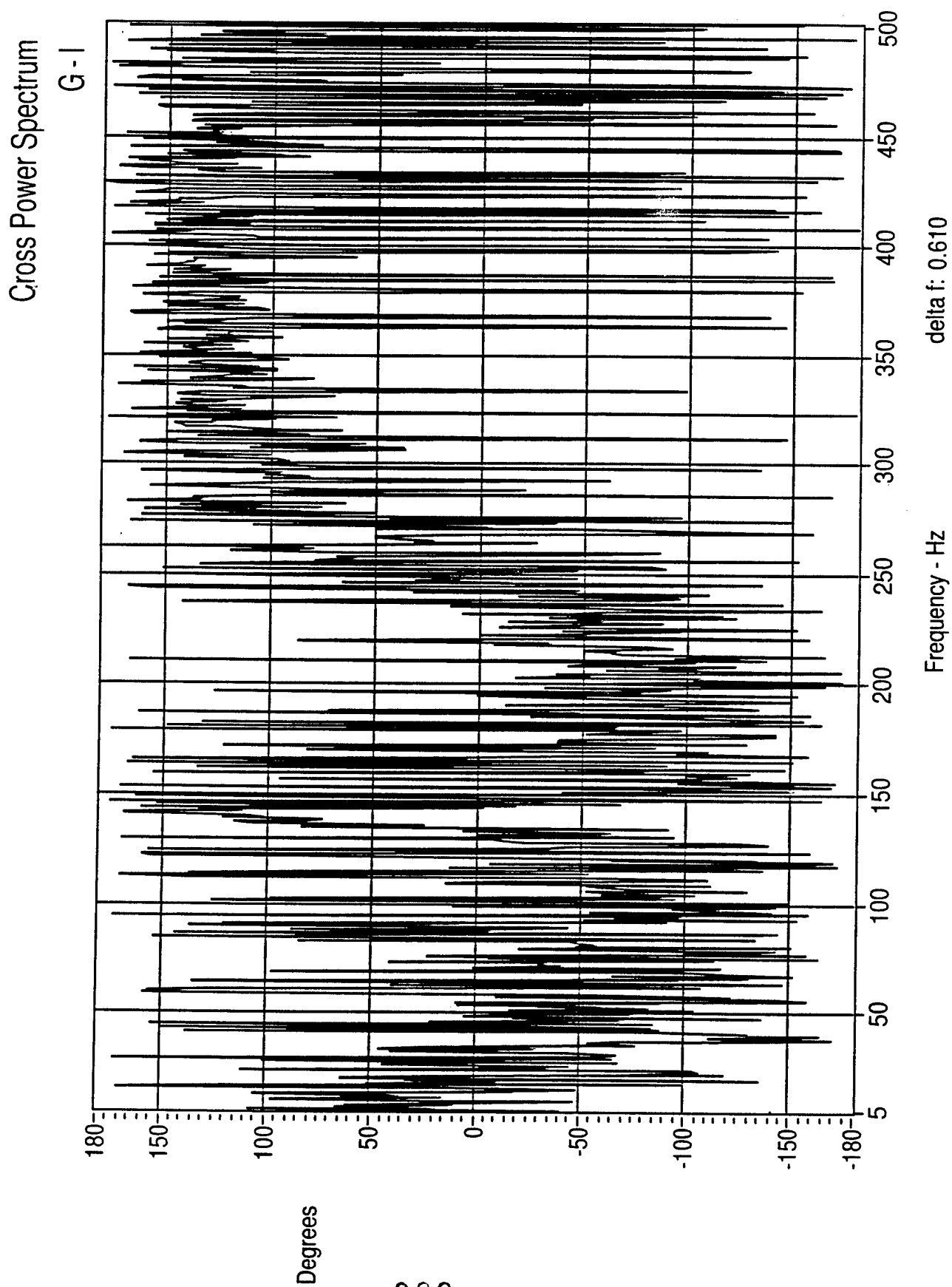
F-15 TPN\_2864: alpha=8 beta=-4 bp=0

# Cross Power Spectrum

G-I



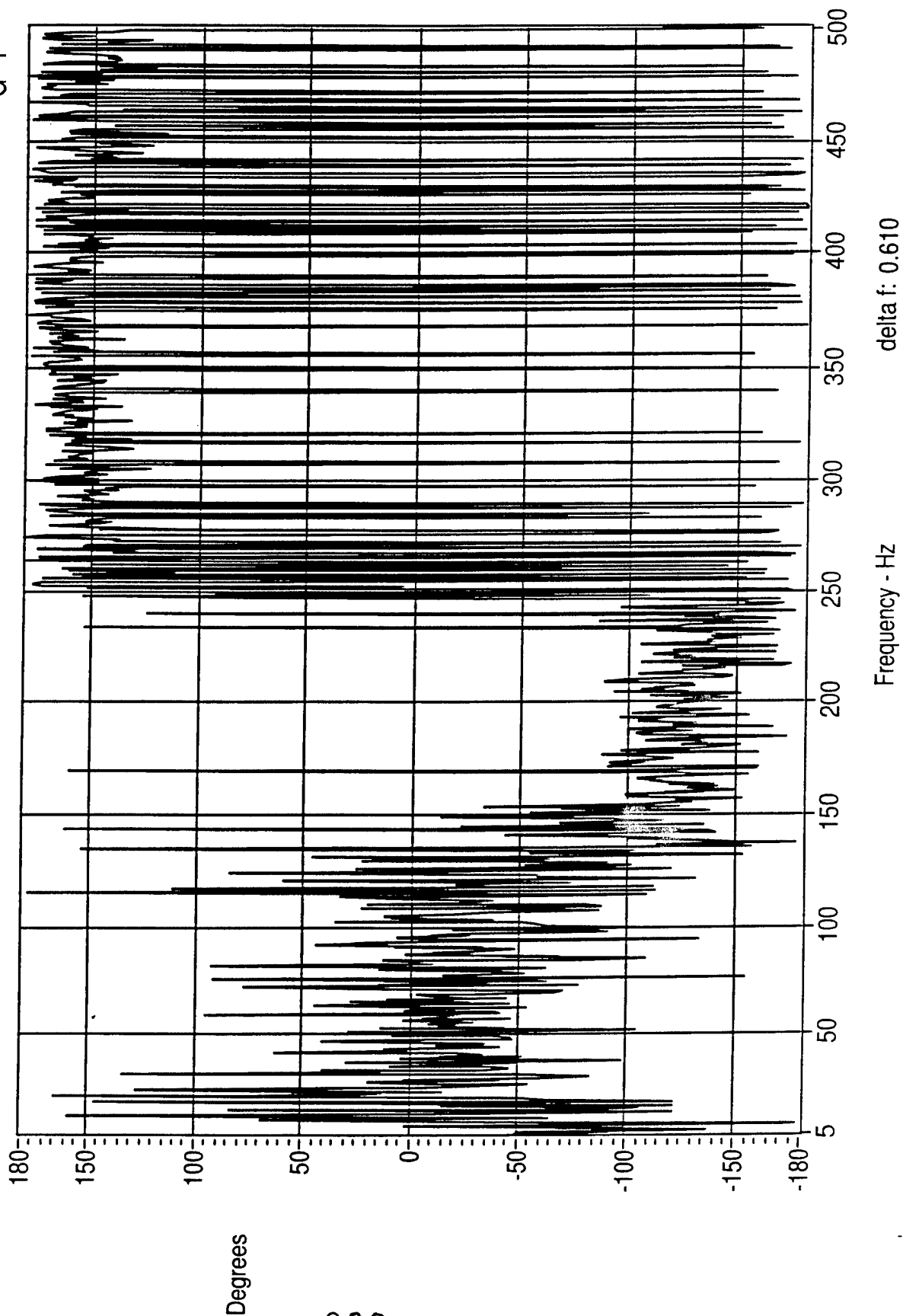
F-15 TPN\_2870: alpha=20 beta=-4 bp=0



F-15 TPN\_2872: alpha=24 beta=-4 bp=0

# Cross Power Spectrum

G-I

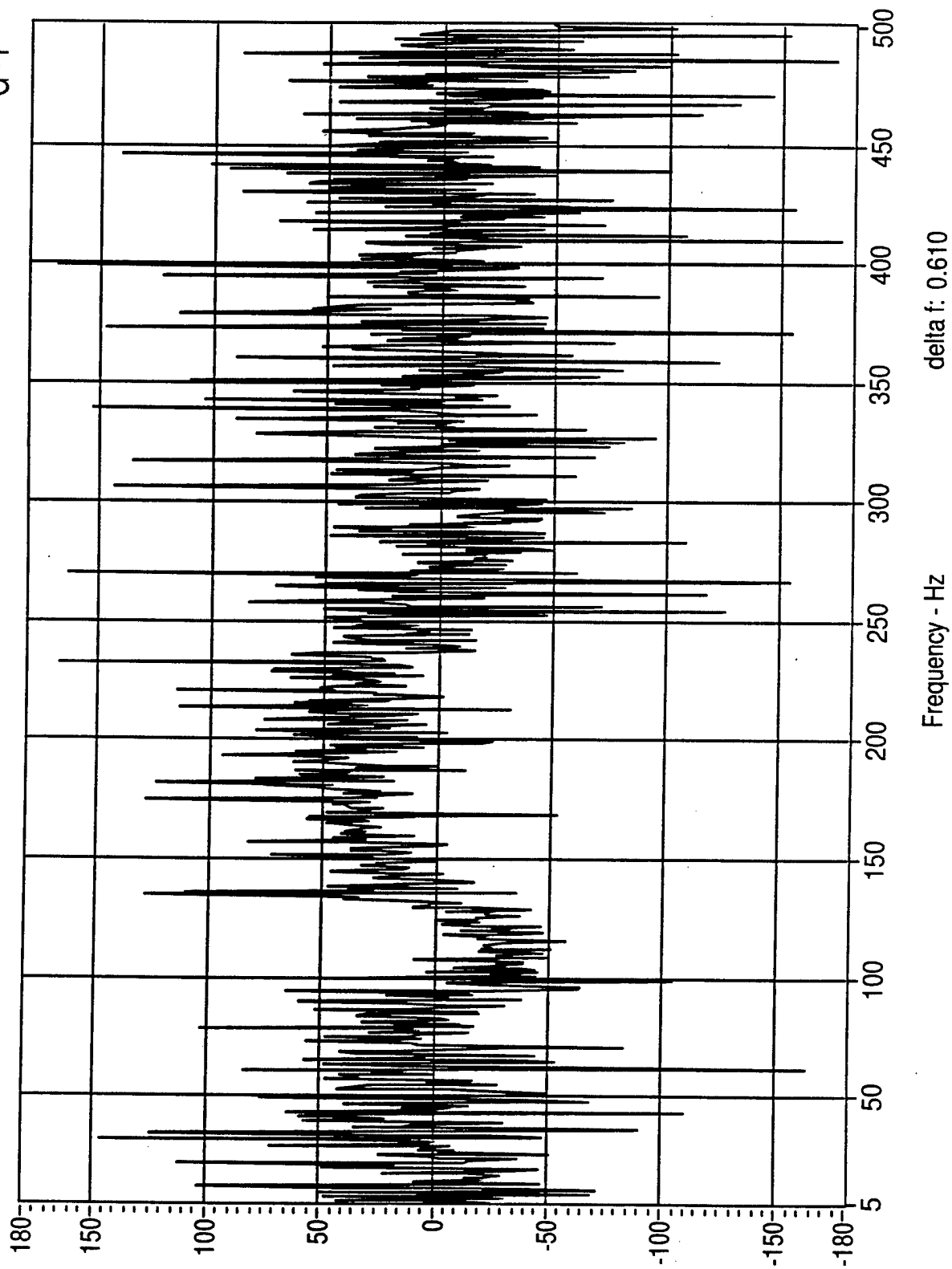




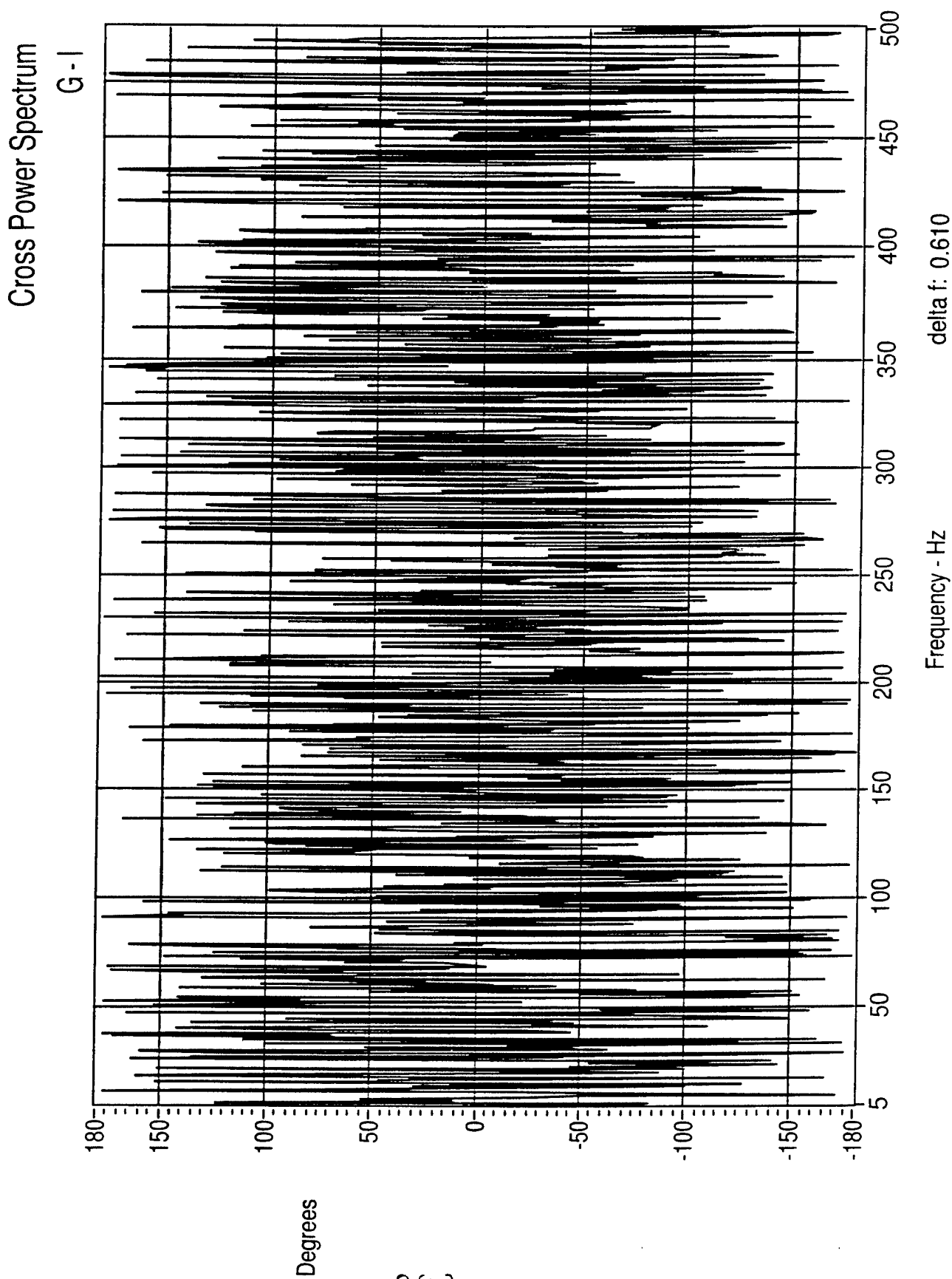
F-15 TPN\_2874: alpha=32 beta=-4 bp=0

# Cross Power Spectrum

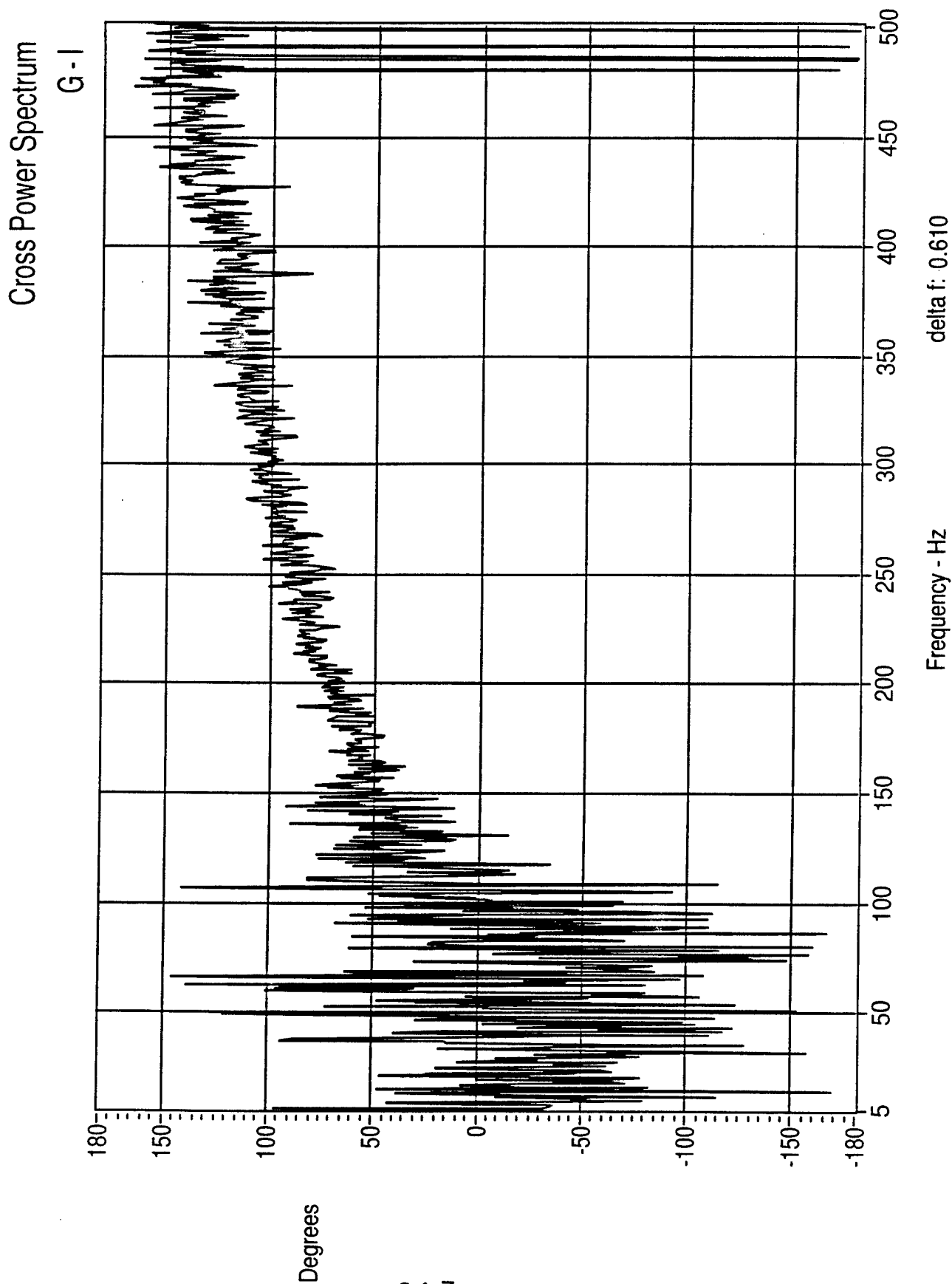
G-I



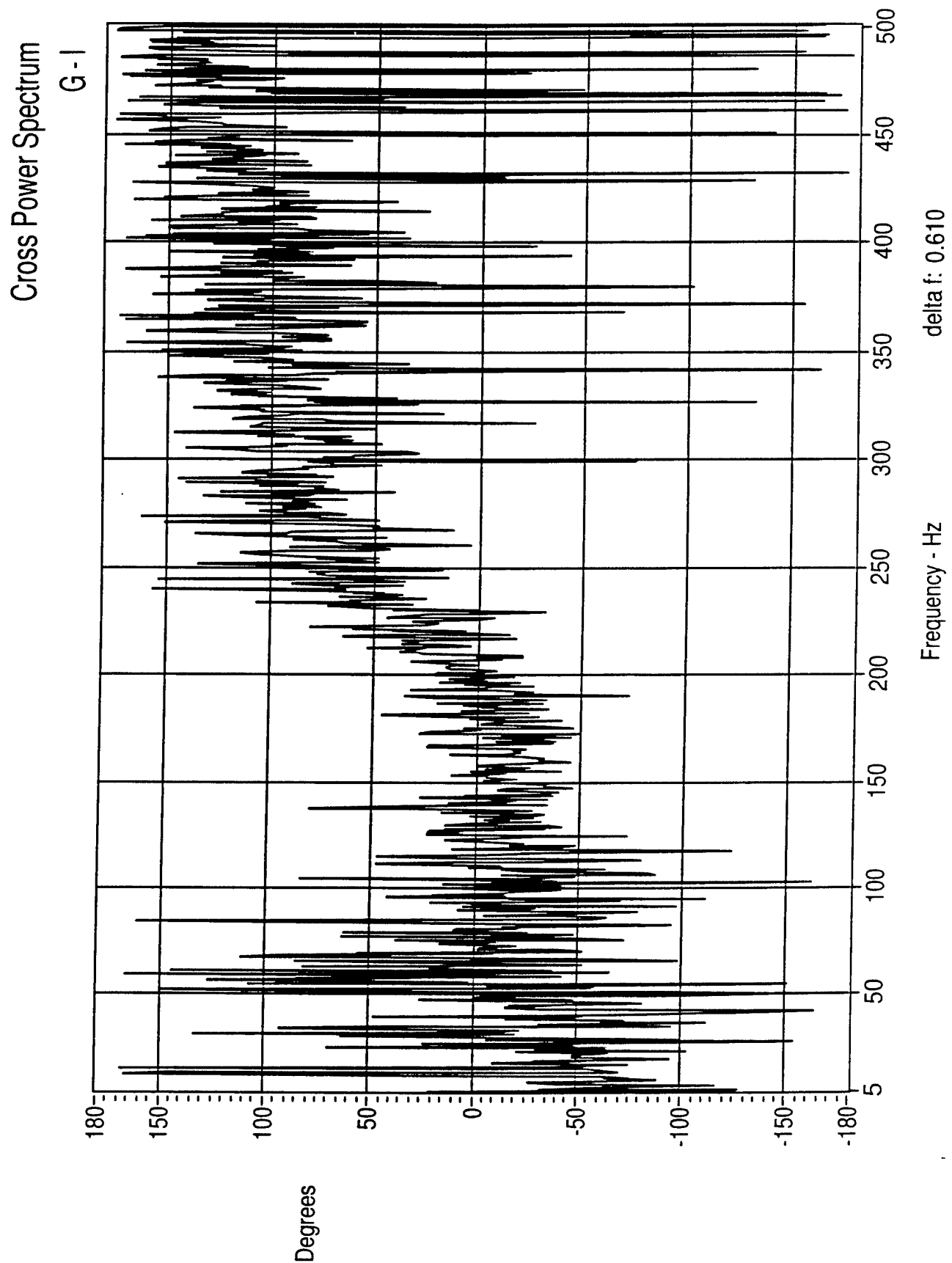
F-15 TPN\_3351: alpha=8 beta=4 bp=45



F-15 TPN\_3357: alpha=20 beta=4 bp=45



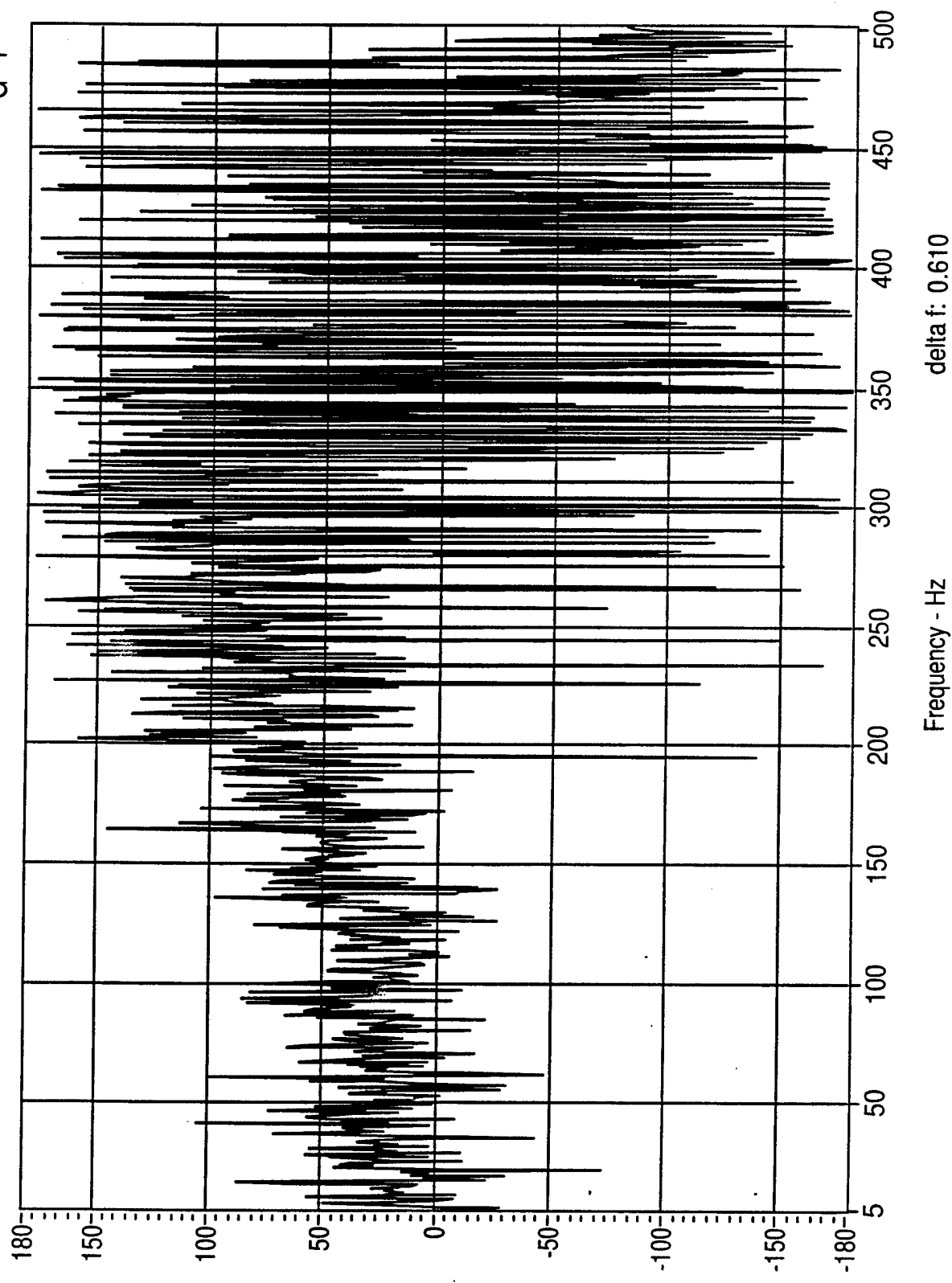
F-15 TPN\_3359: alpha=24 beta=4 bp=45



F-15 TPN\_3361: alpha=32 beta=4 bp=45

# Cross Power Spectrum

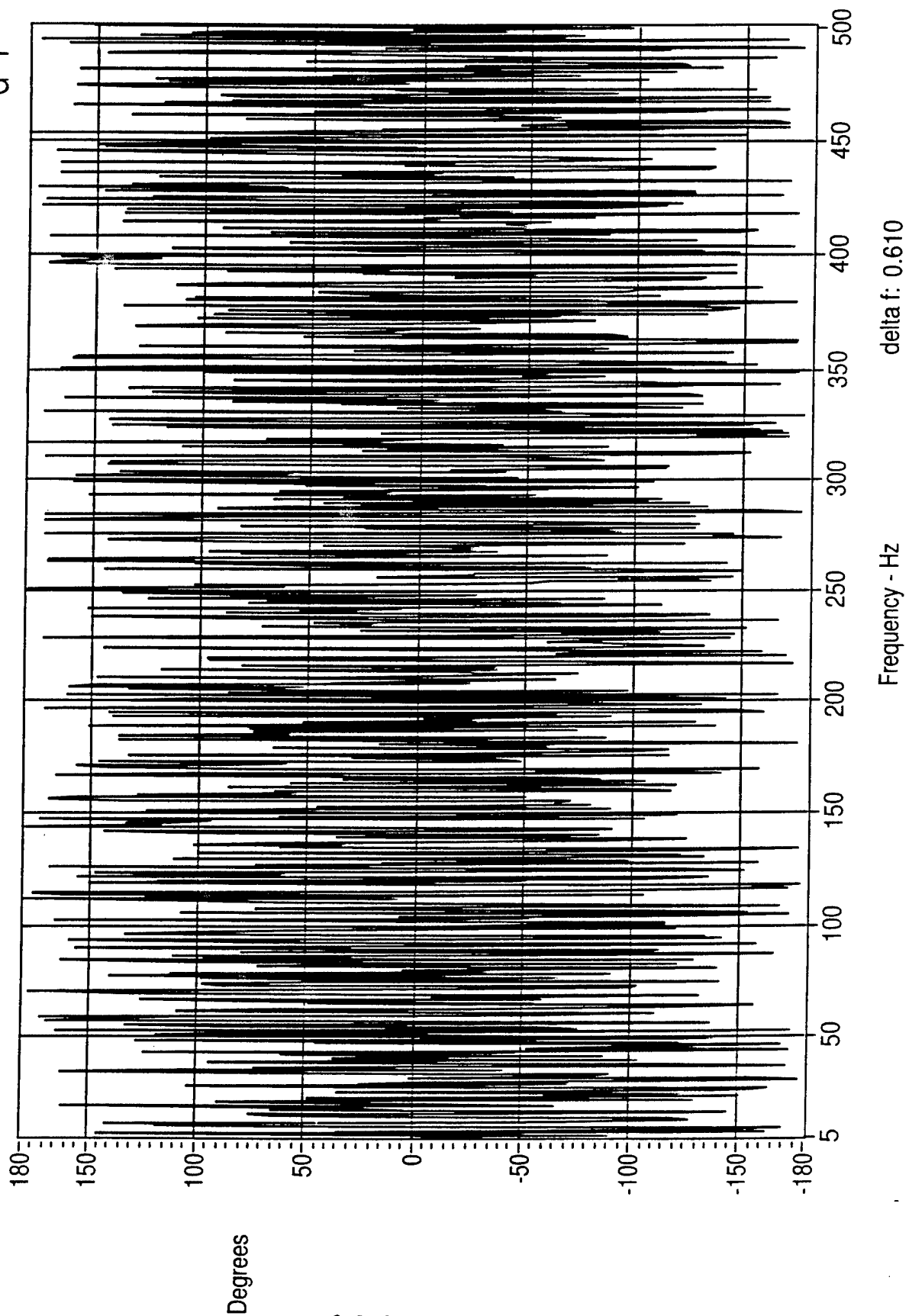
G-I



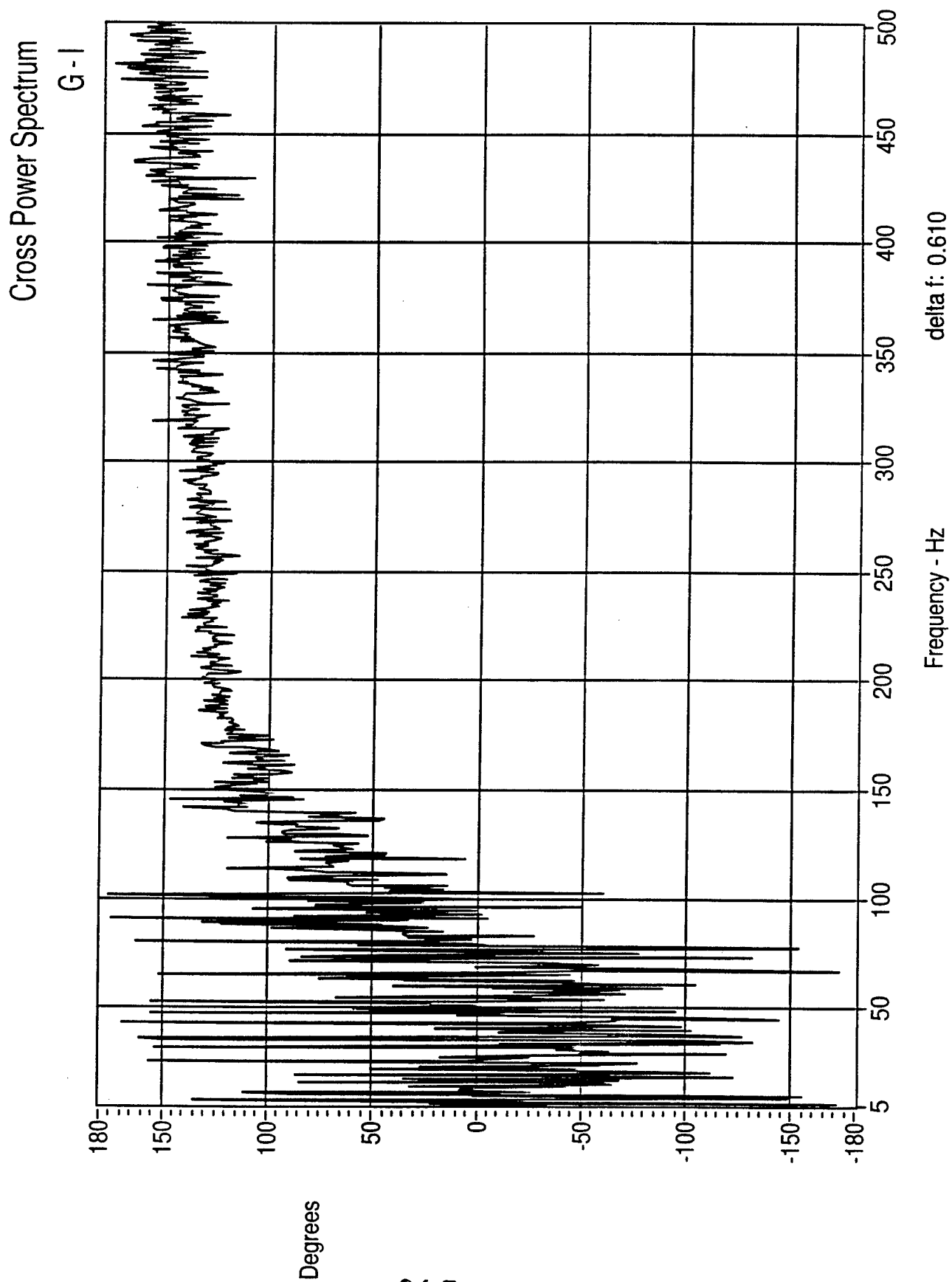
F-15 TPN\_3333: alpha=8 beta=0 bp=45

# Cross Power Spectrum

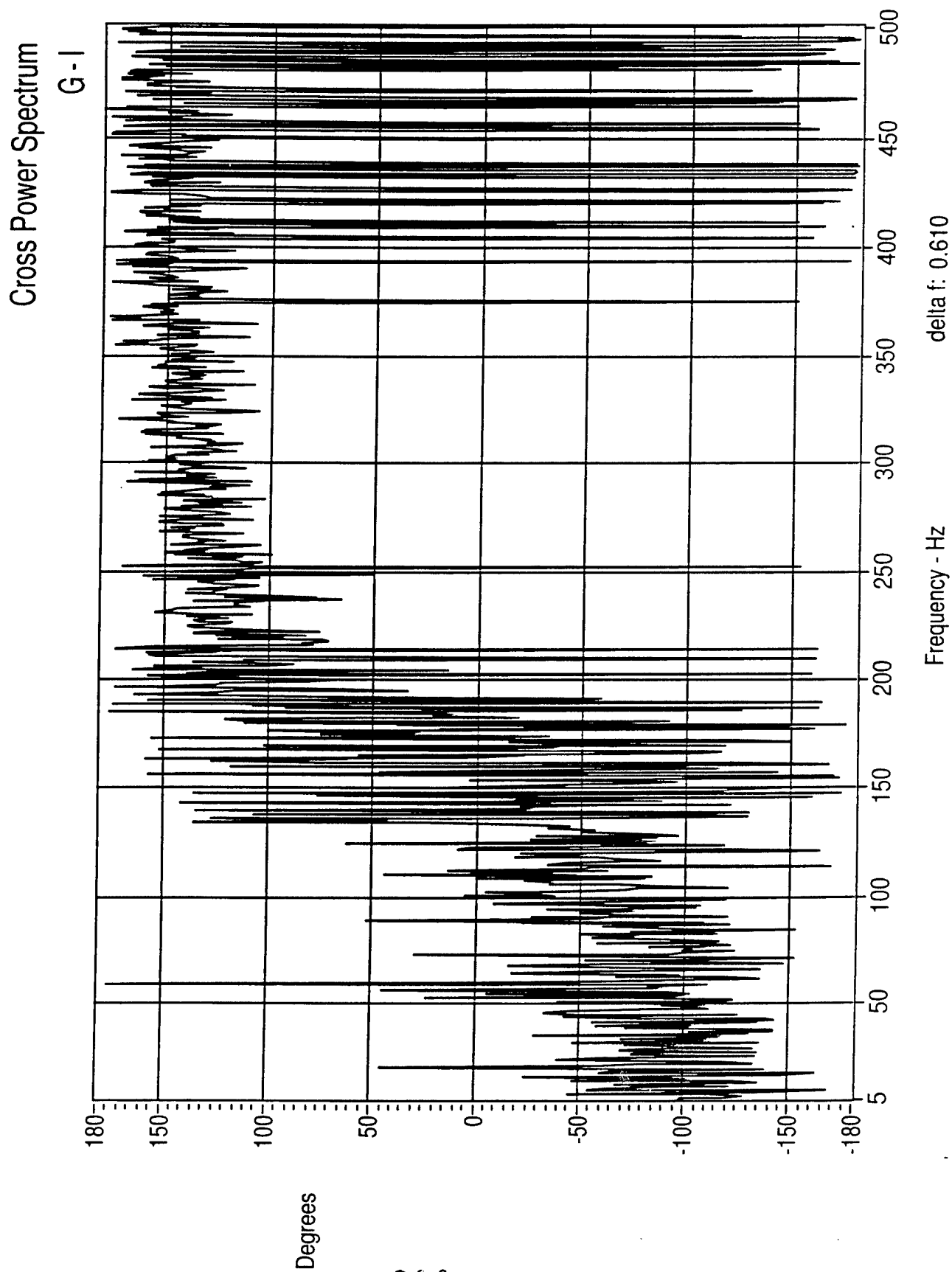
G-I



F-15 TPN\_3339:alpha=20 beta=0 bp=45

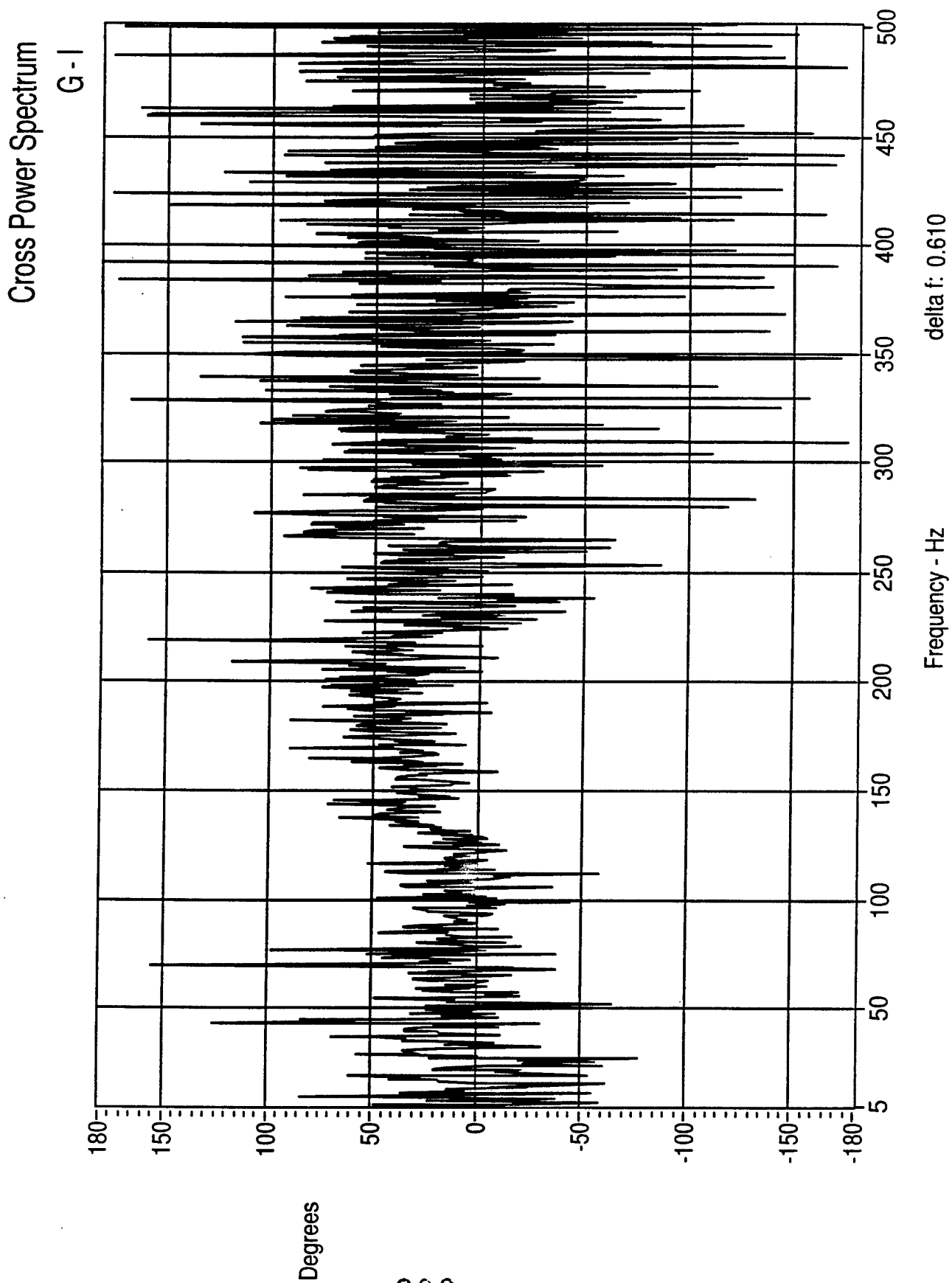


F-15 TPN\_3341: alpha=24 beta=0 bp=45





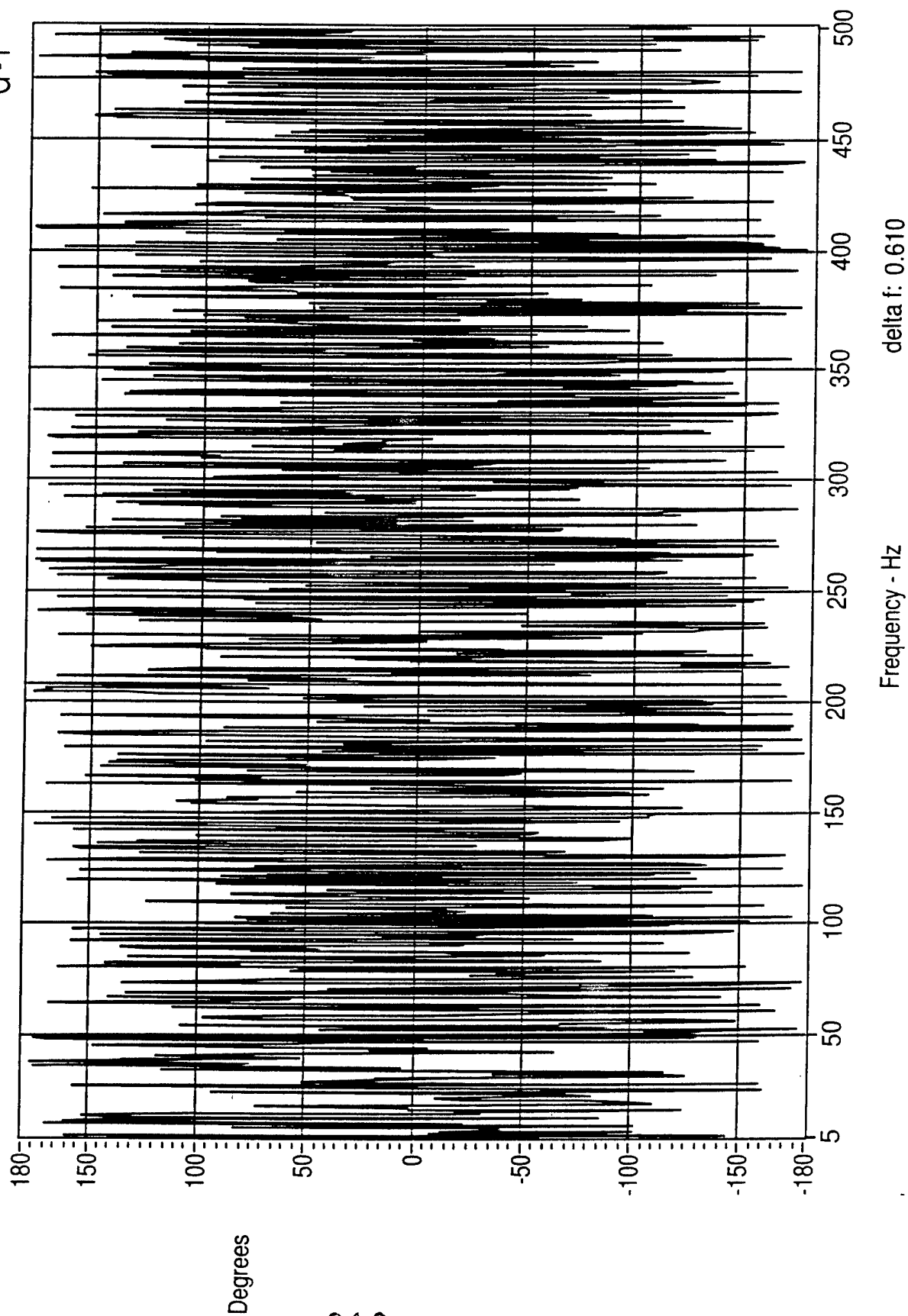
F-15 TPN\_3343: alpha=32 beta=0 bp=45



F-15 TPN\_3369: alpha=8 beta=-4 bp=45

# Cross Power Spectrum

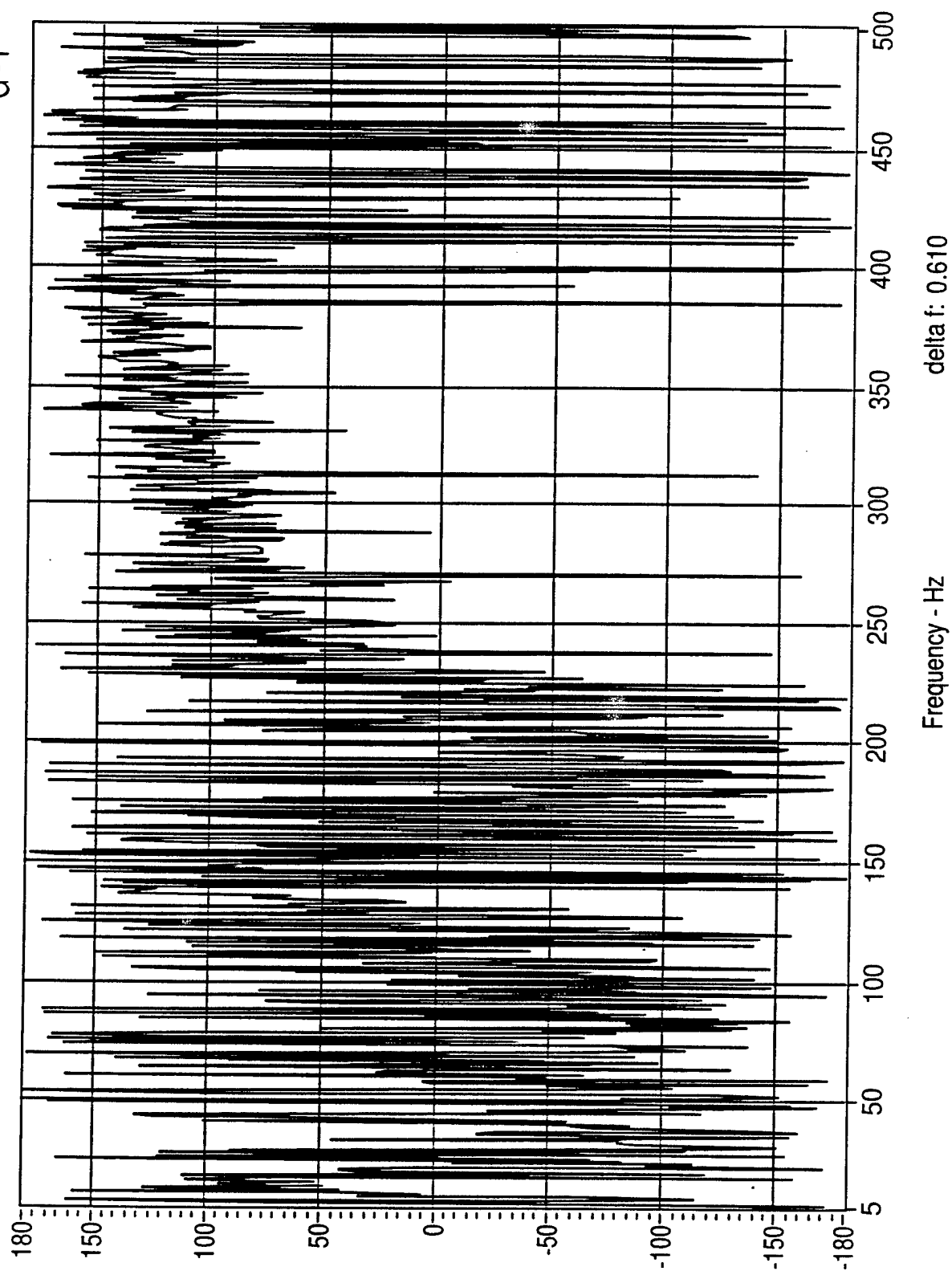
G-I



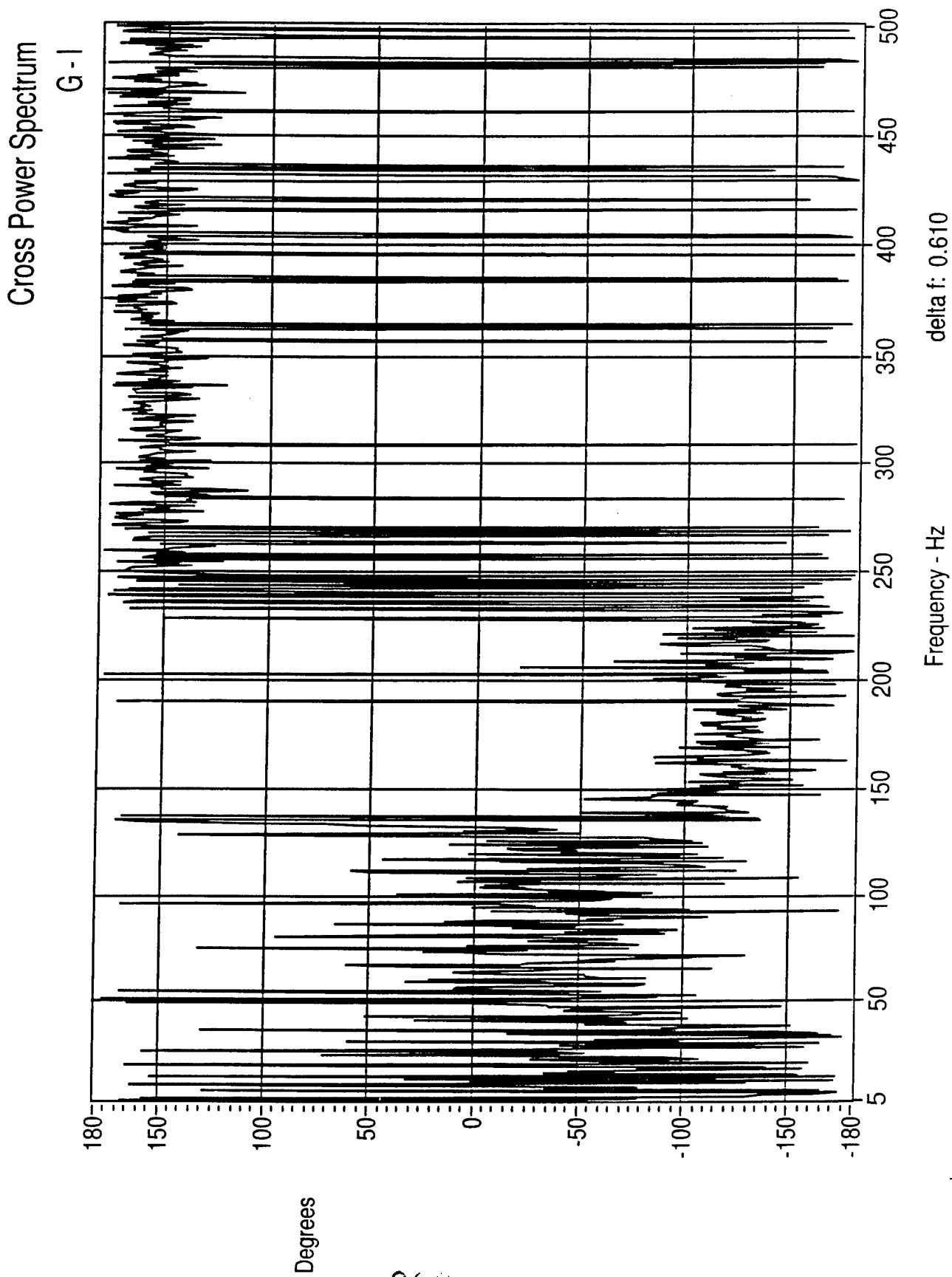
F-15 TPN\_3375: alpha=20 beta=-4 bp=45

Cross Power Spectrum

G-I



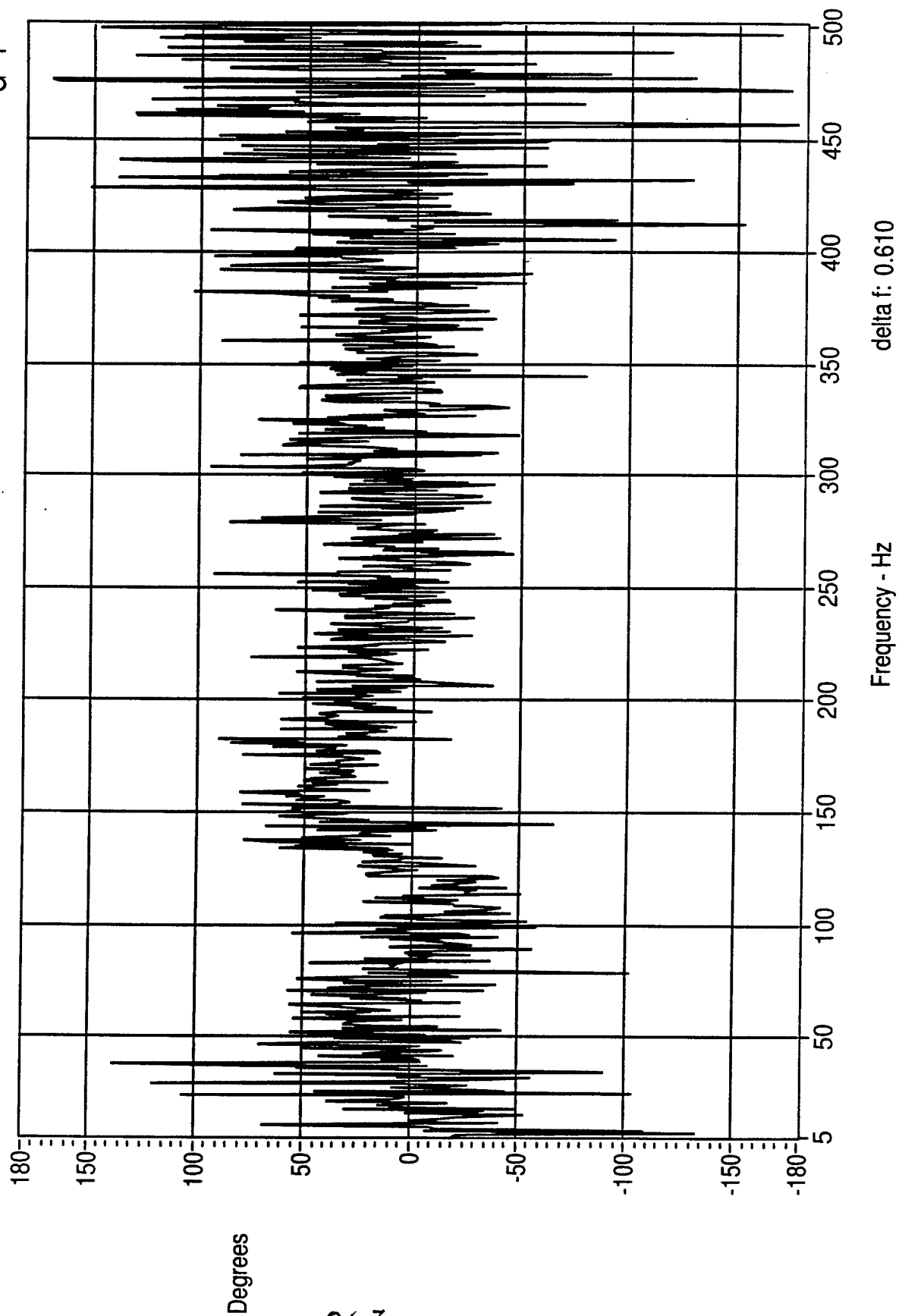
F-15 TPN\_3377: alpha=24 beta=-4 bp=45



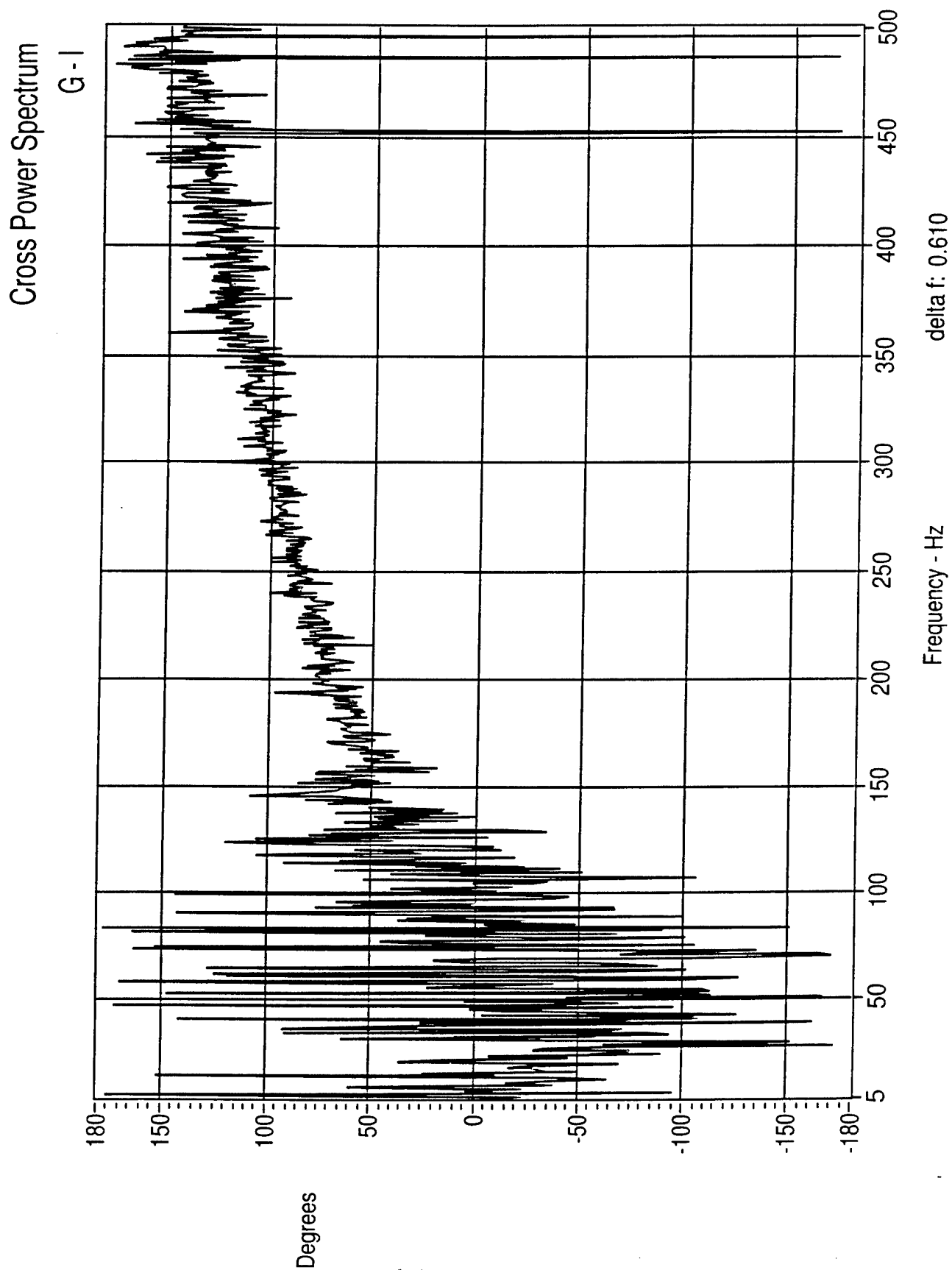
F-15 TPN\_3379: alpha=32 beta=-4 bp=45

# Cross Power Spectrum

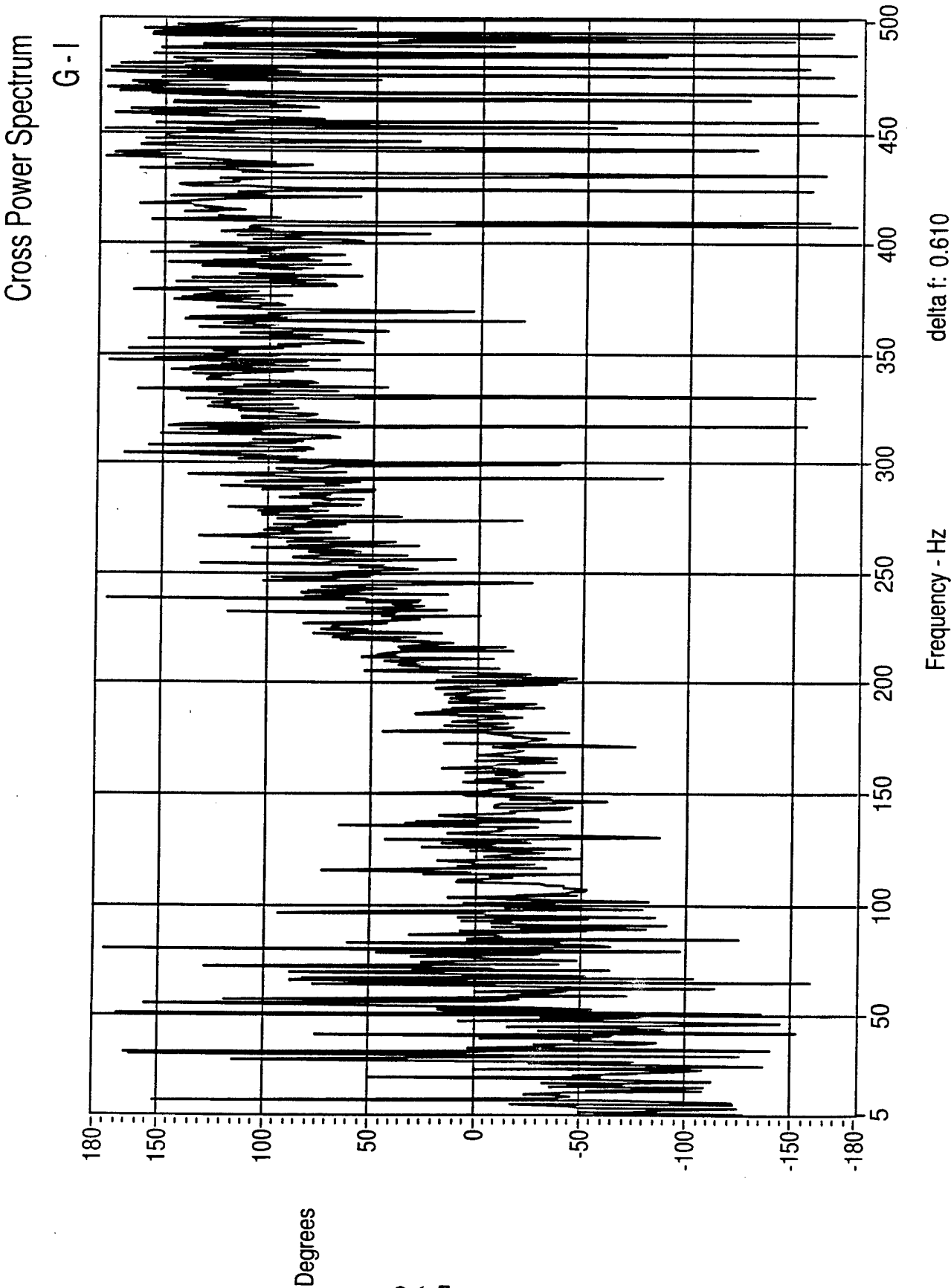
G-I



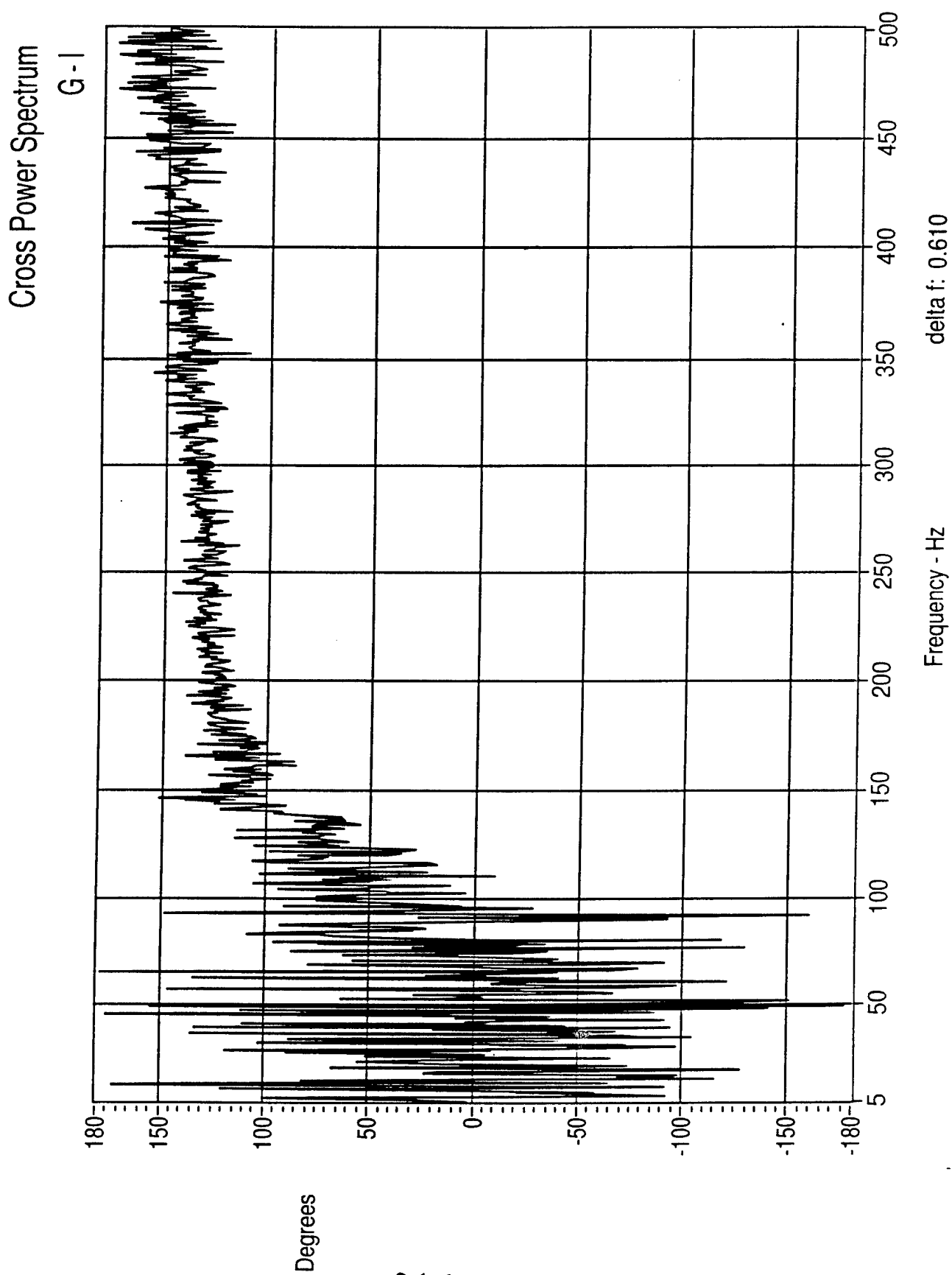
F-15 TPN\_3046: alpha=20 beta=4 bp=65



F-15 TPN\_3048: alpha=24 beta=4 bp=65

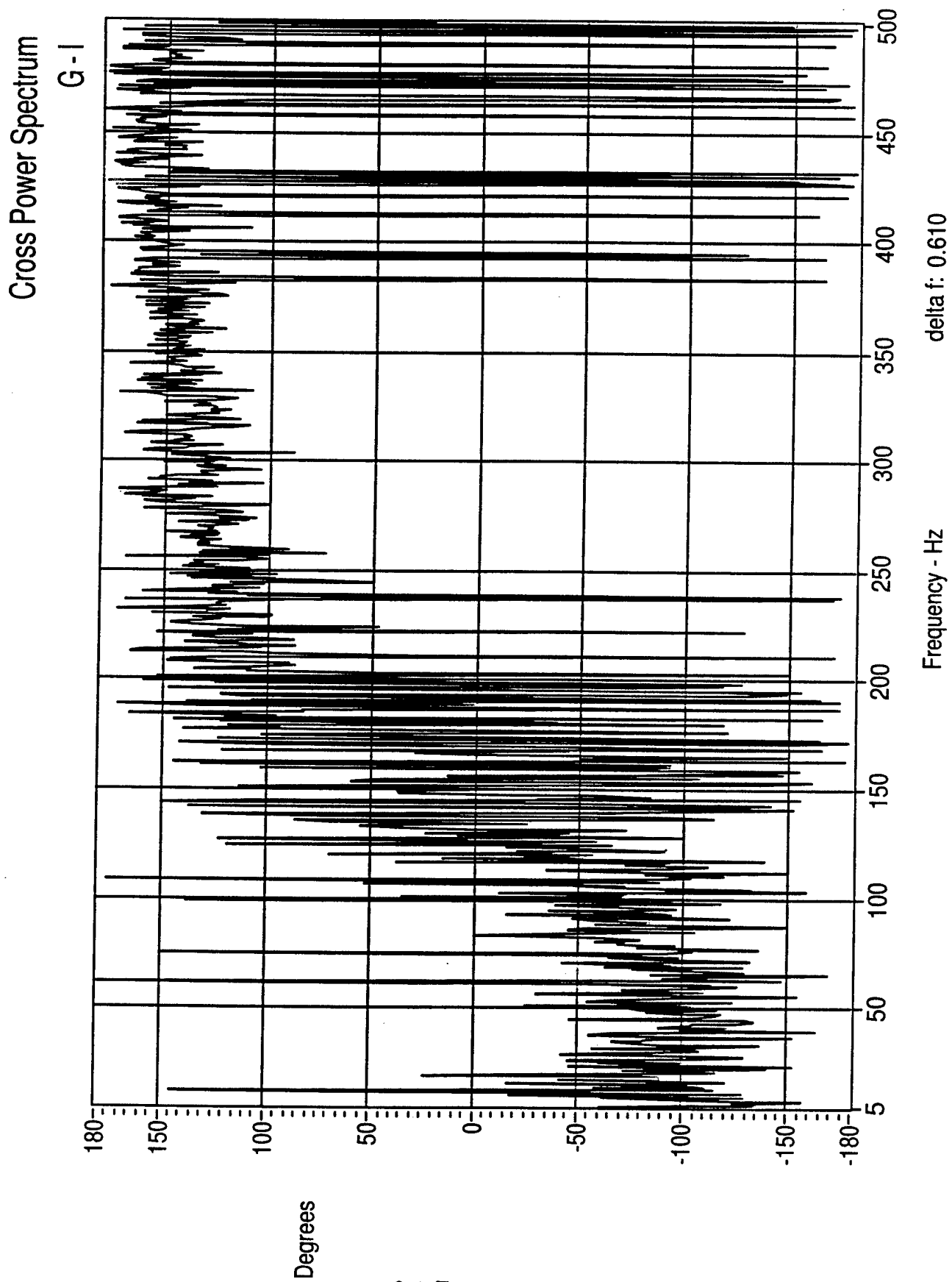


F-15 TPN\_3040: alpha=20 beta=0 bp=65

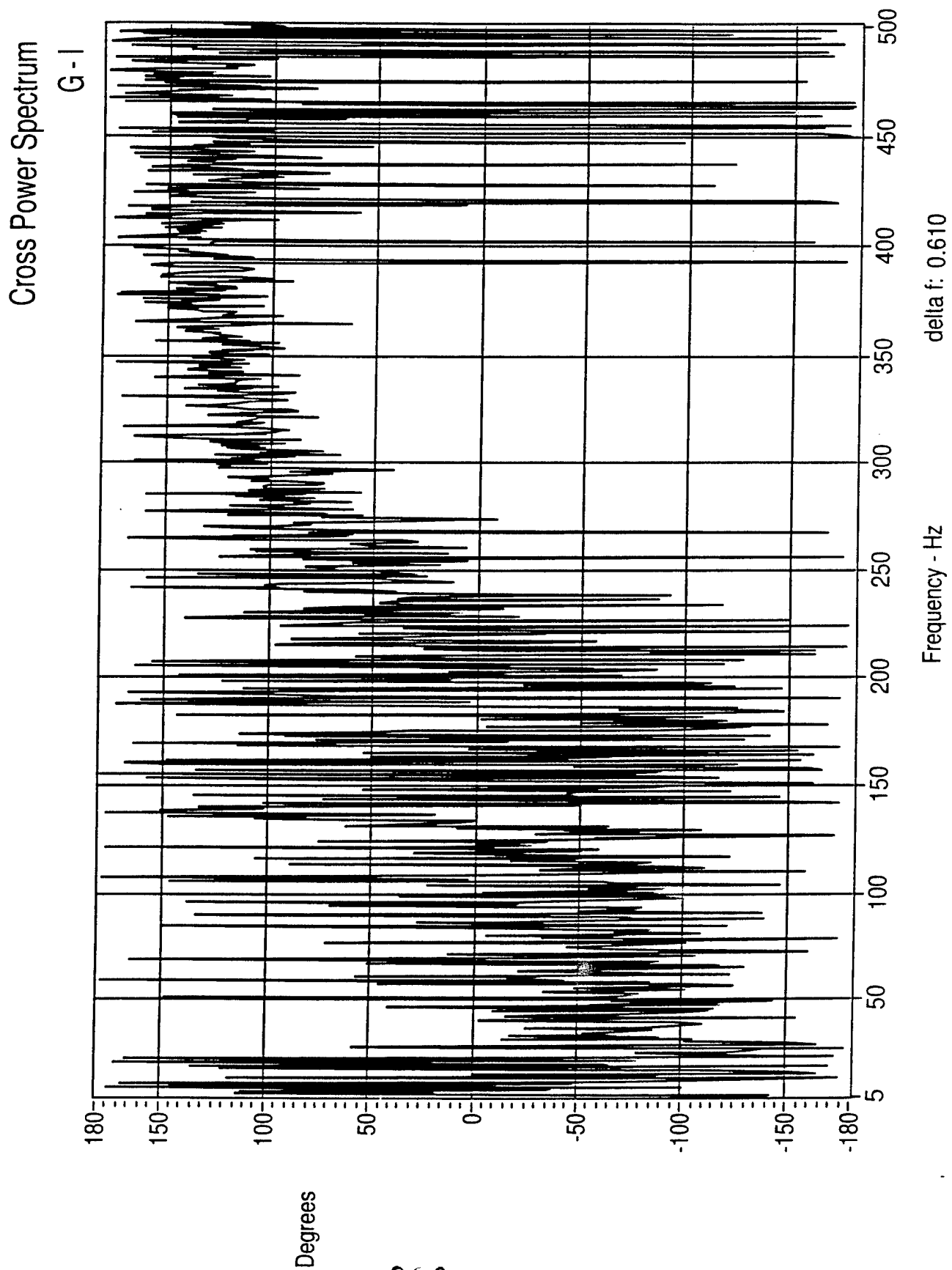




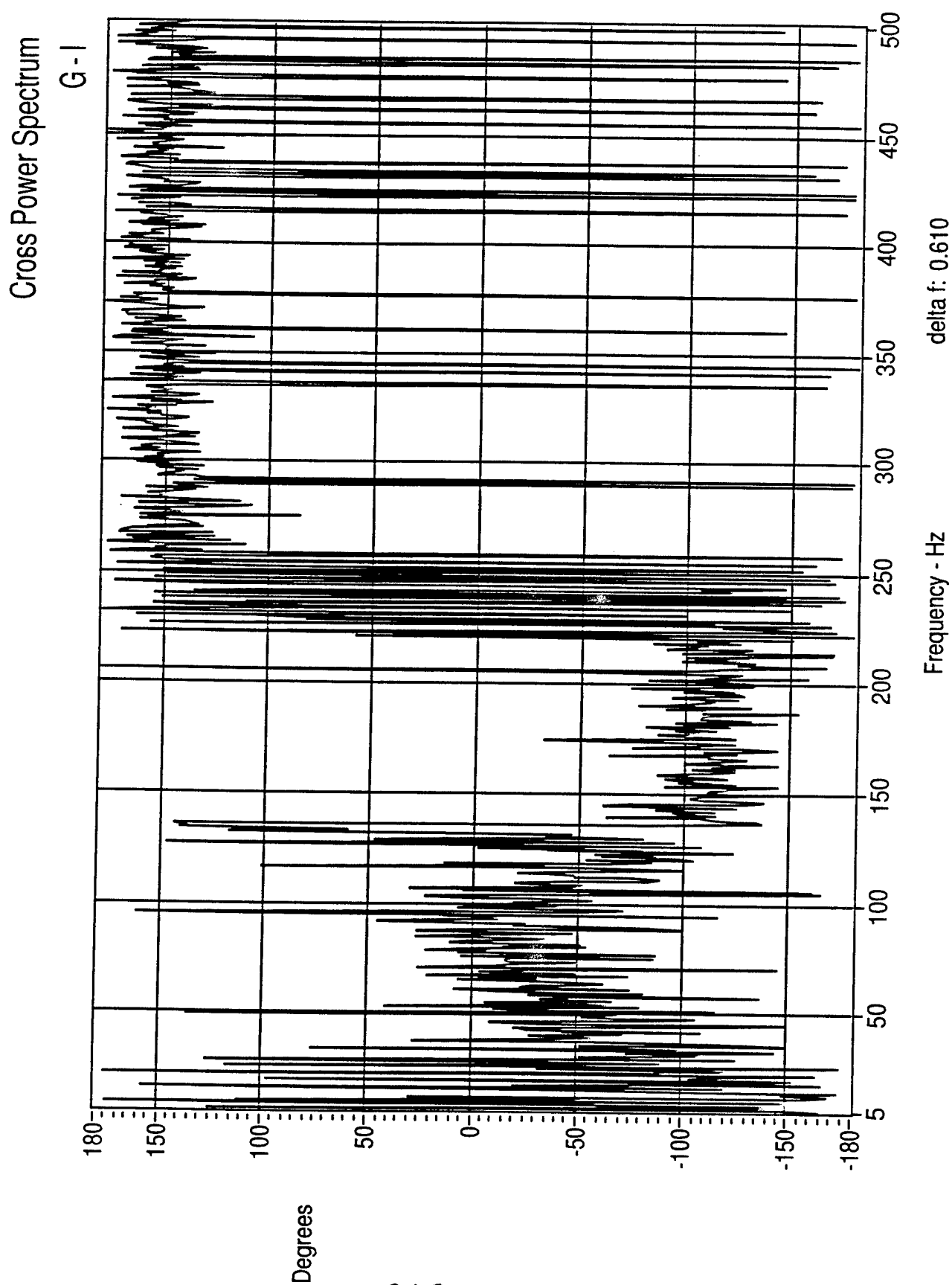
F-15 TPN\_3042:alpha=24 beta=0 bp=65



F-15 TPN\_3034: alpha=20 beta=-4 bp=65

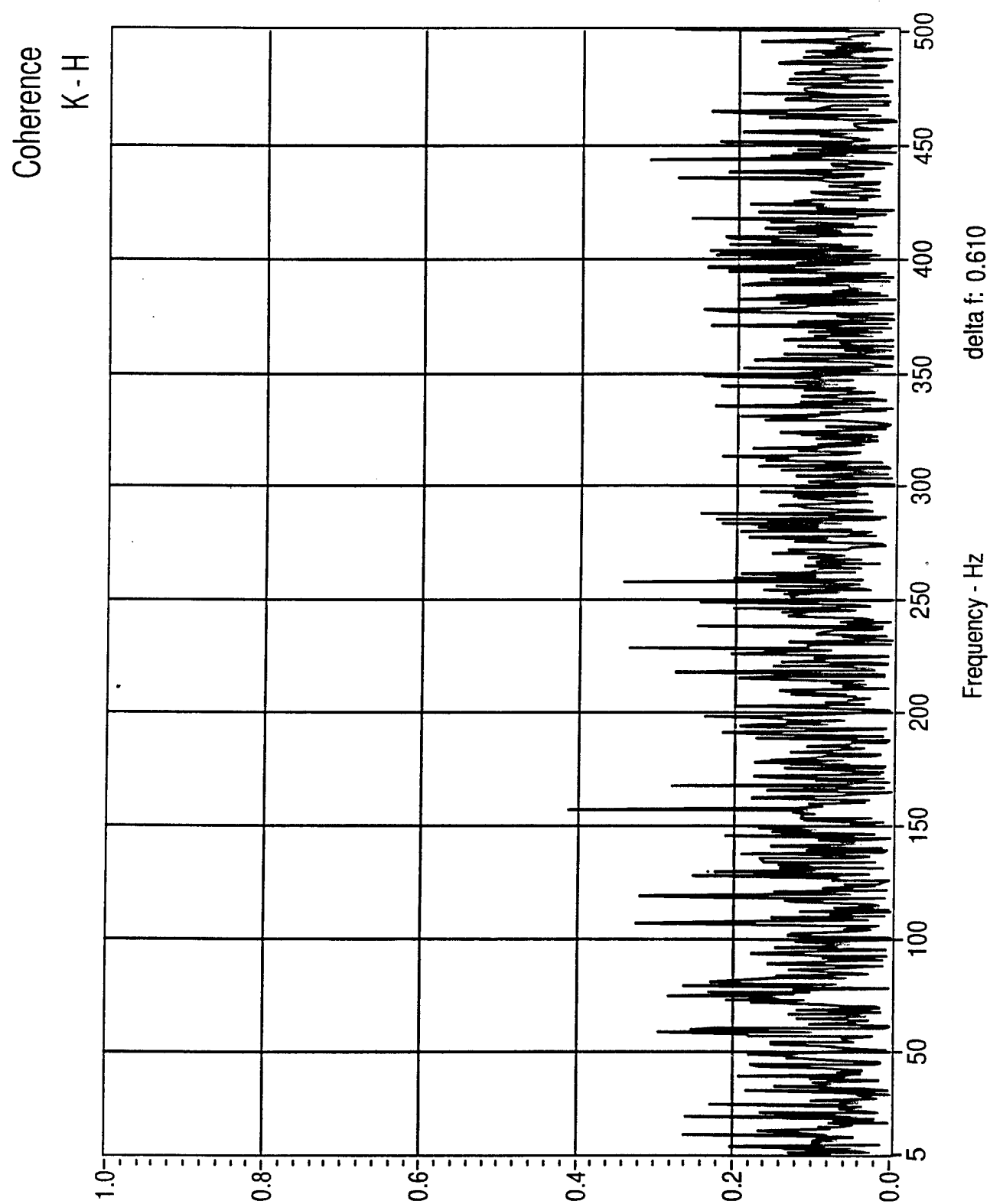


F-15 TPN\_3036: alpha=24 beta=-4 bp=65

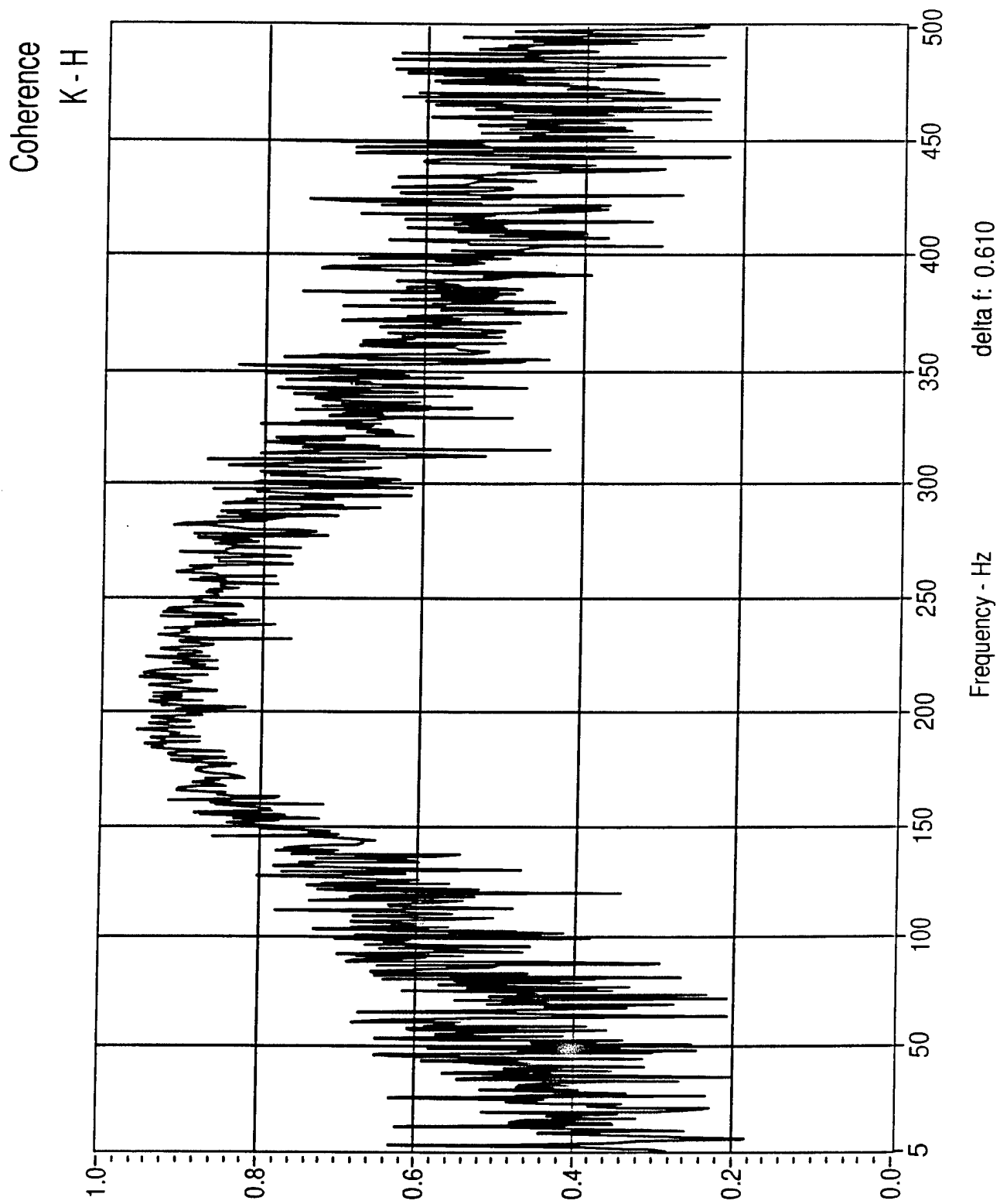


## 2.4 COHERENCE GRAPHS, $Q=56$ PSF

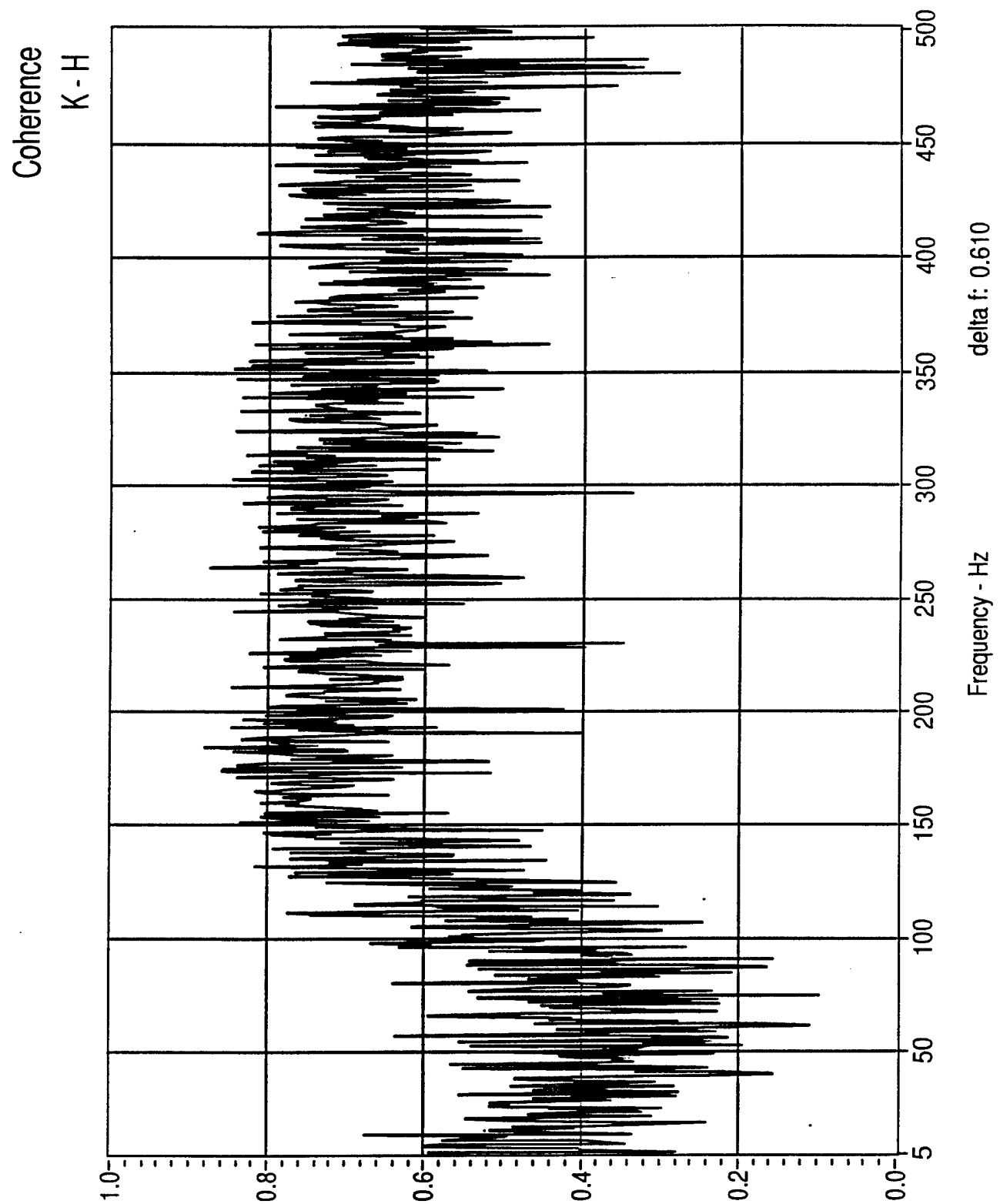
F-15 TPN\_2918: alpha=8 beta=4 bp=0



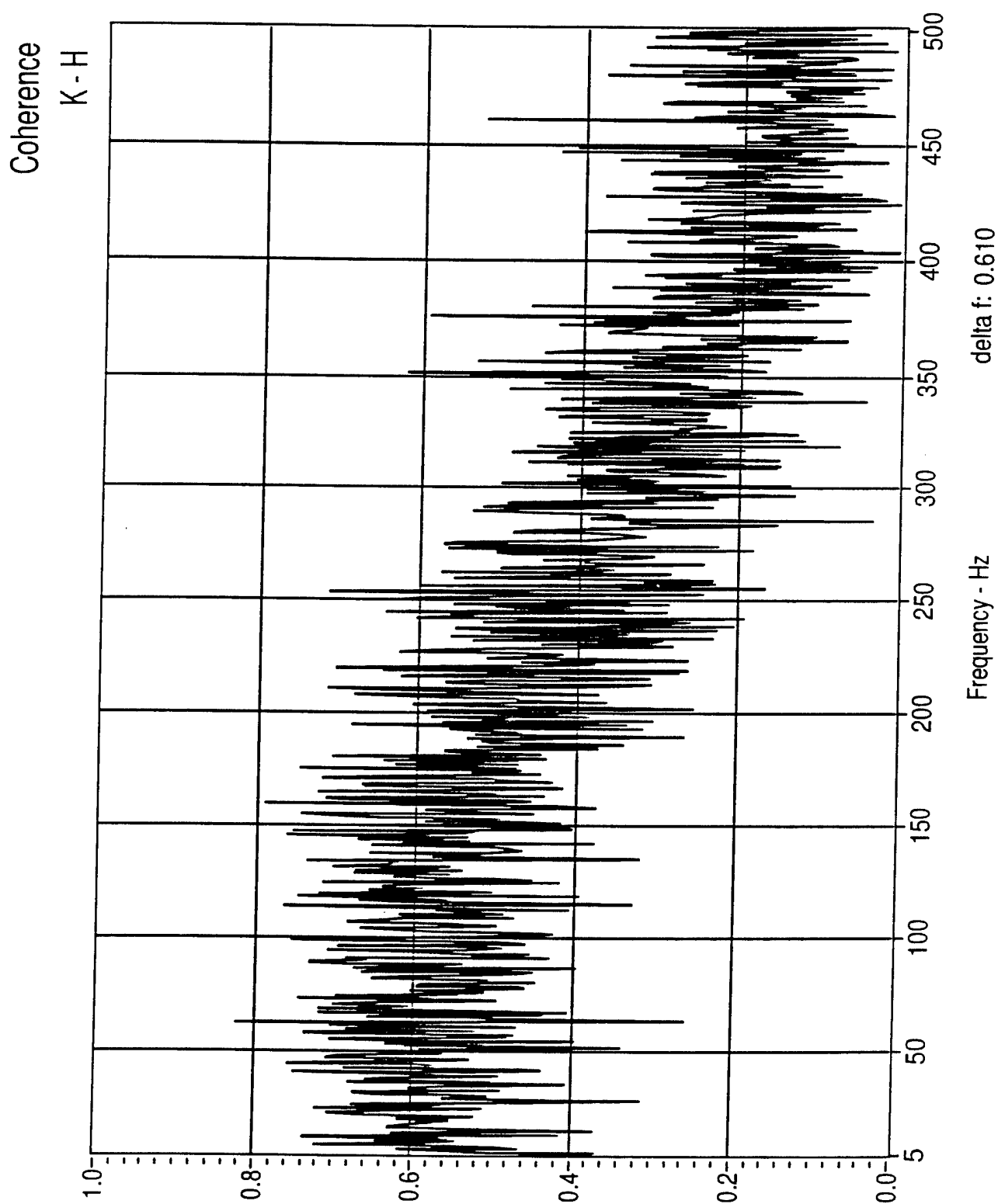
F-15 TPN\_2924: alpha=20 beta=4 bp=0



F-15 TPN\_2926: alpha=24 beta=4 bp=0

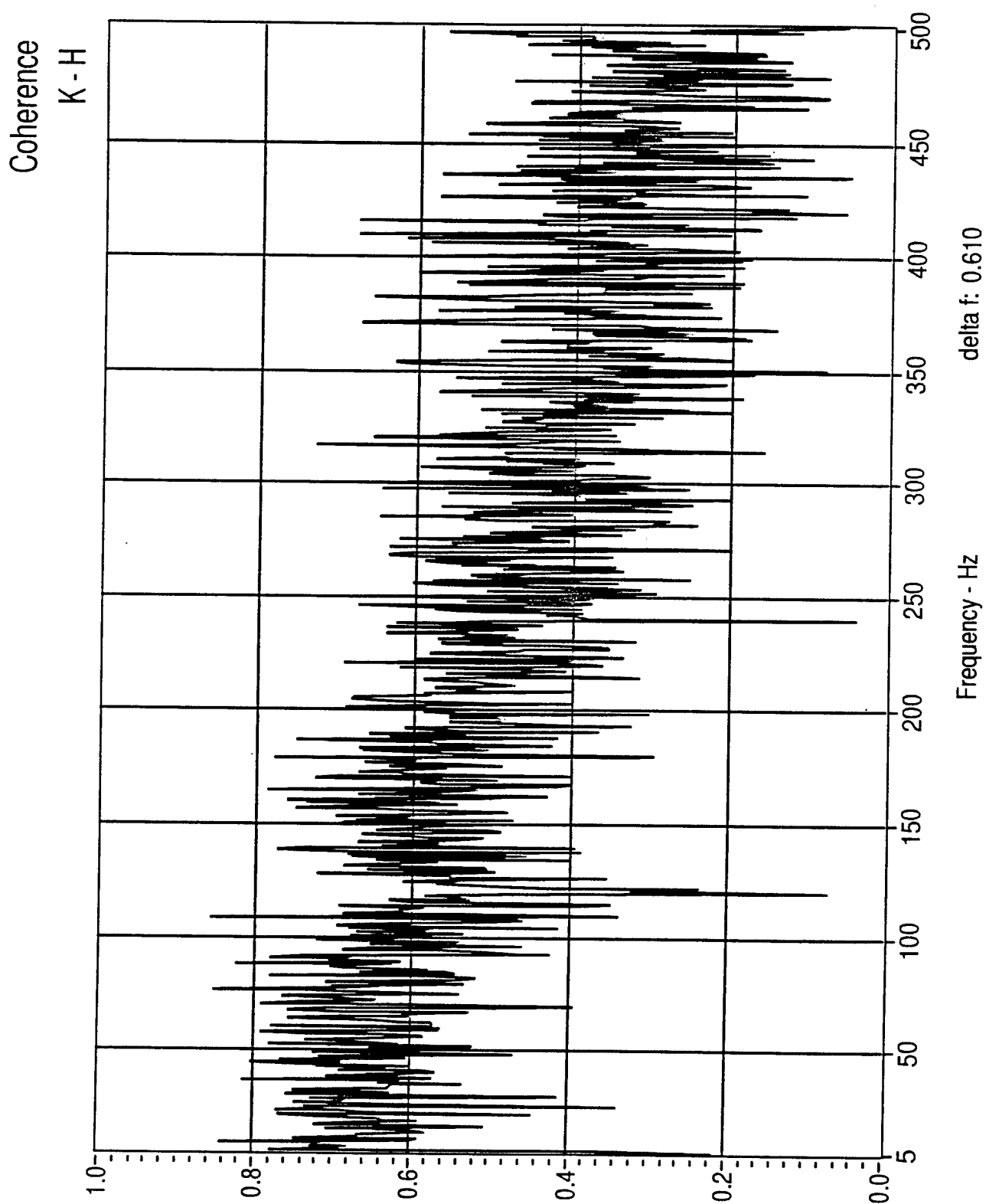


F-15 TPN\_2928:  $\alpha=32$   $\beta=4$   $\text{bp}=0$

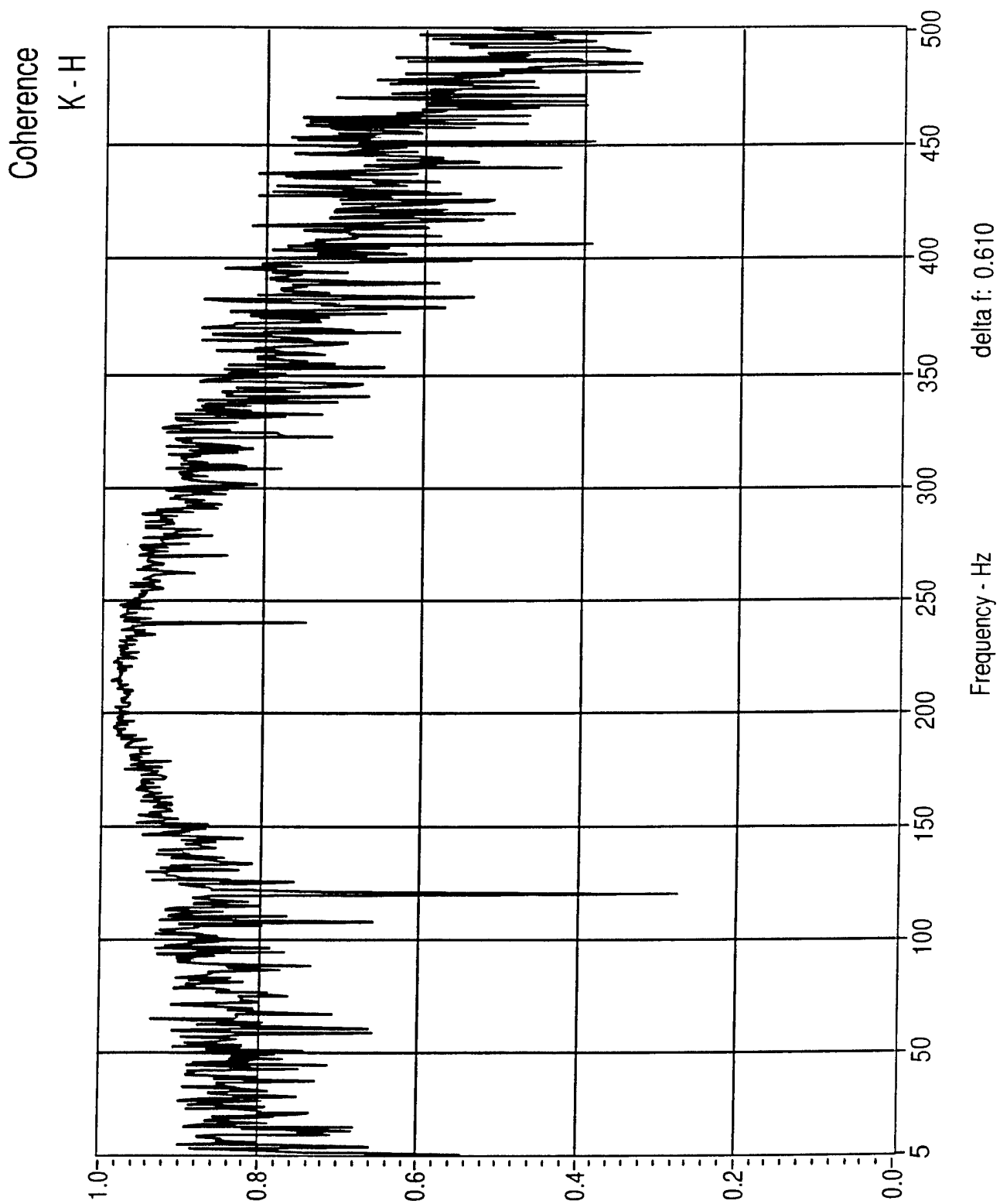




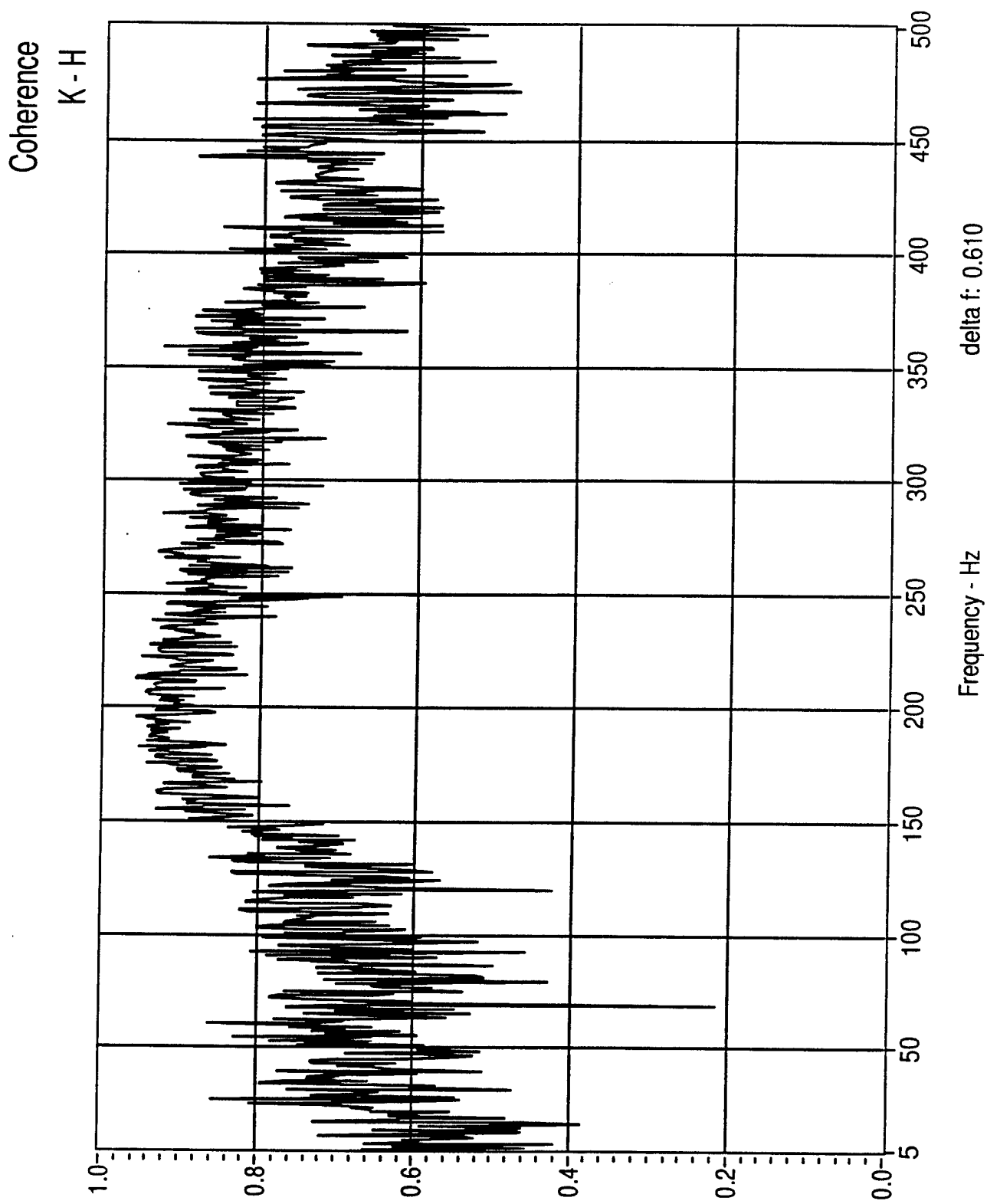
F-15 TPN\_2844:  $\alpha=8$   $\beta=0$  bp=0



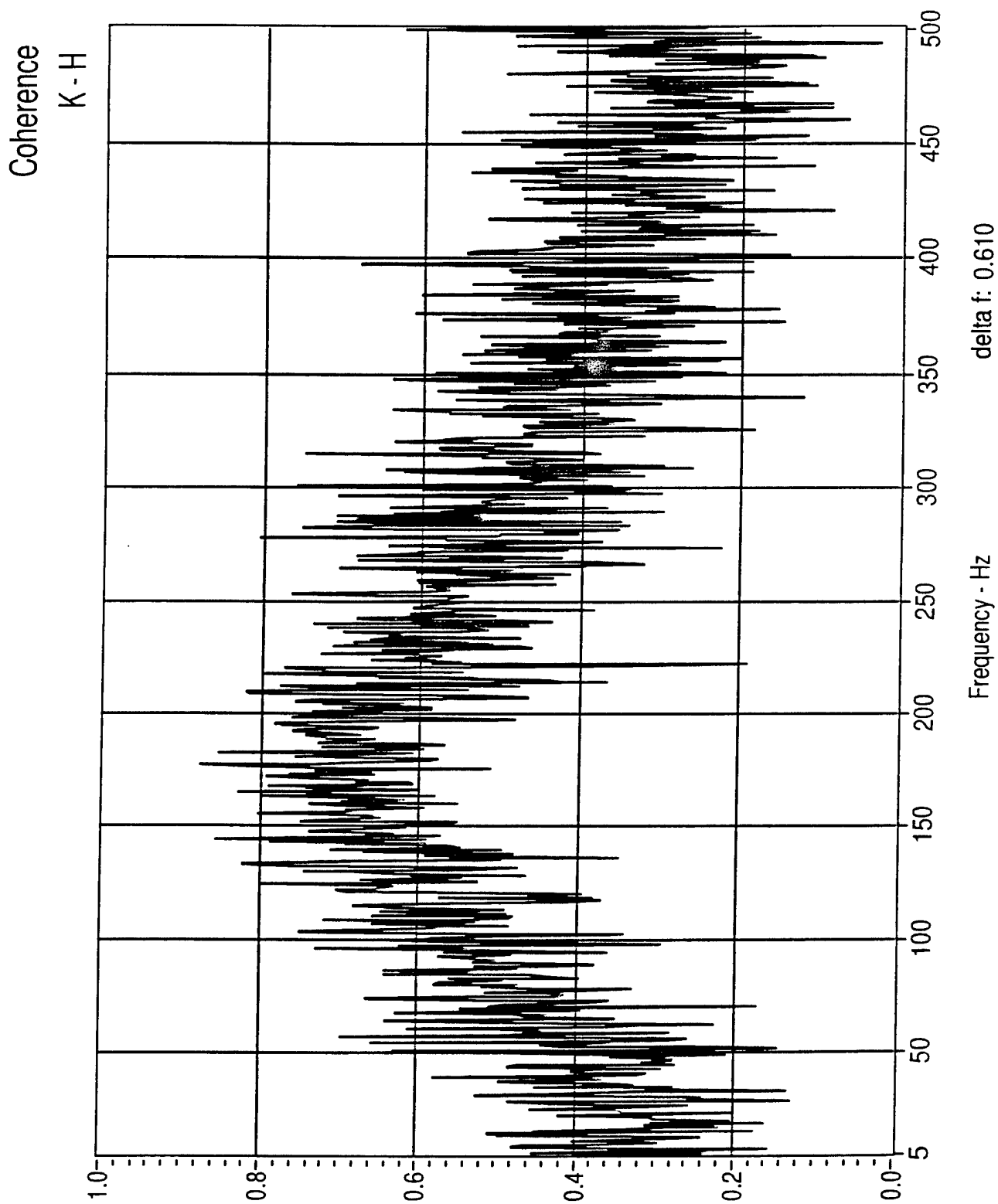
F-15 TPN\_2850: alpha=20 beta=0 bp=0



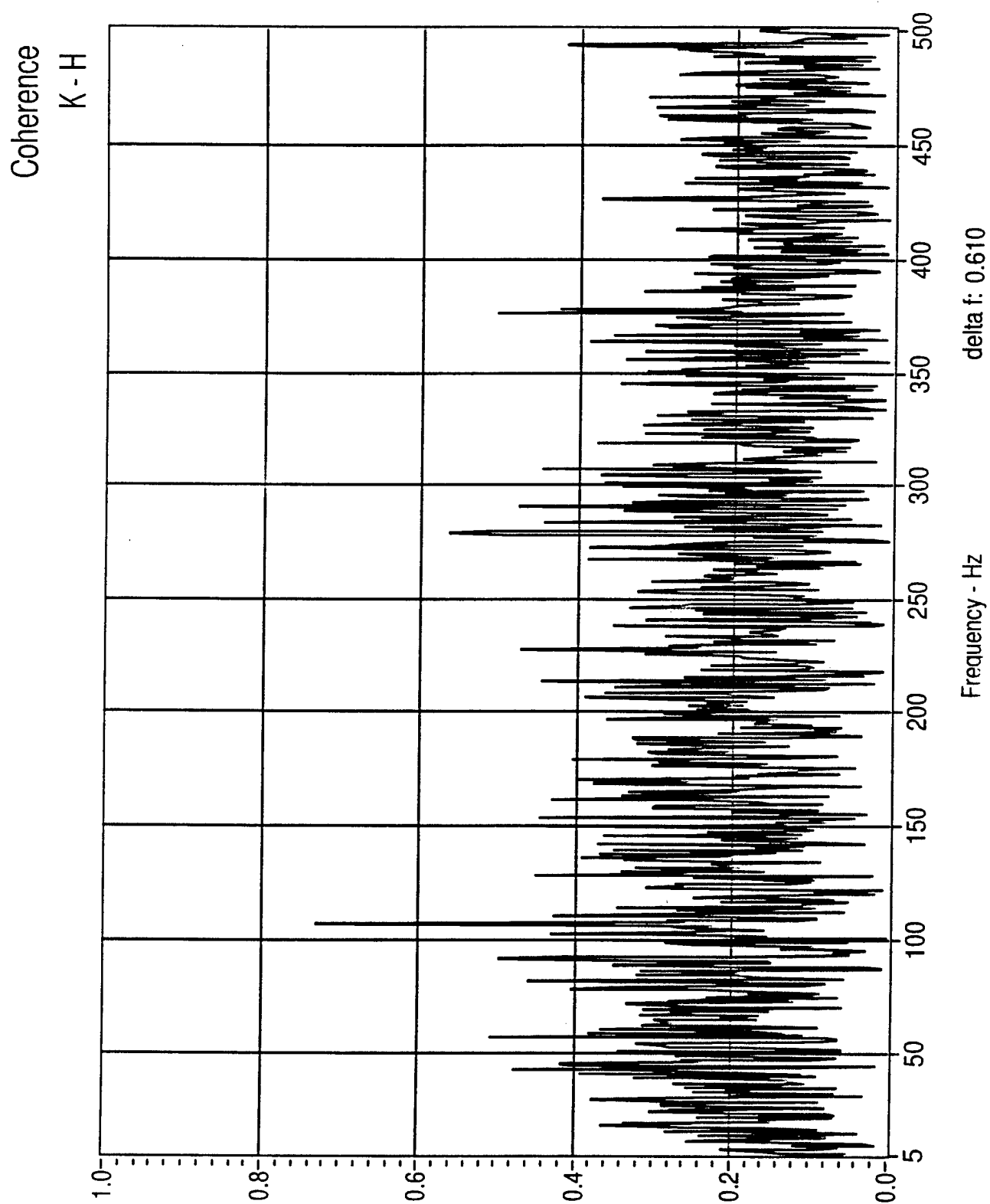
F-15 TPN\_2852: alpha=24 beta=0 bp=0



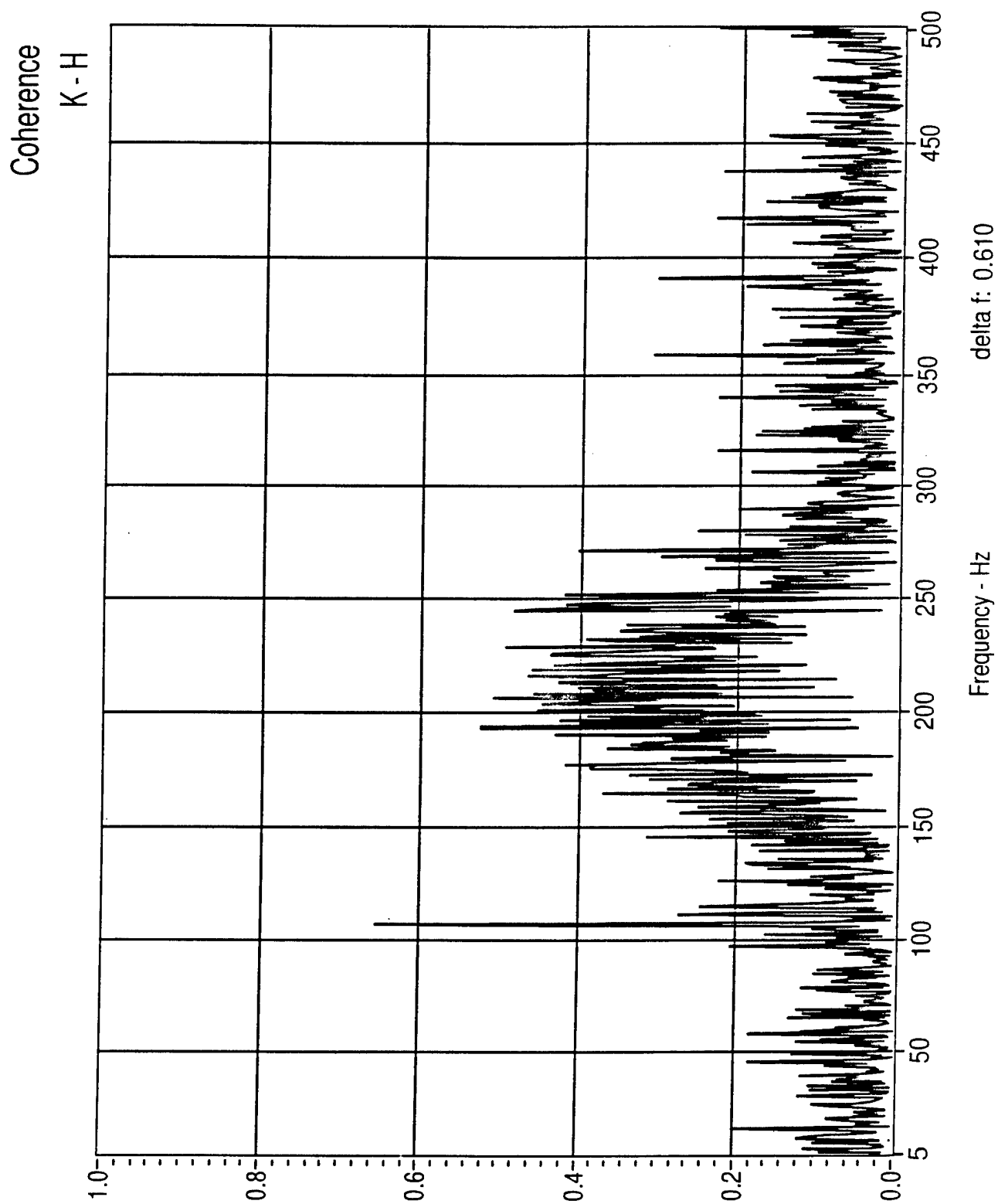
F-15 TPN\_2854: alpha=32 beta=0 bp=0



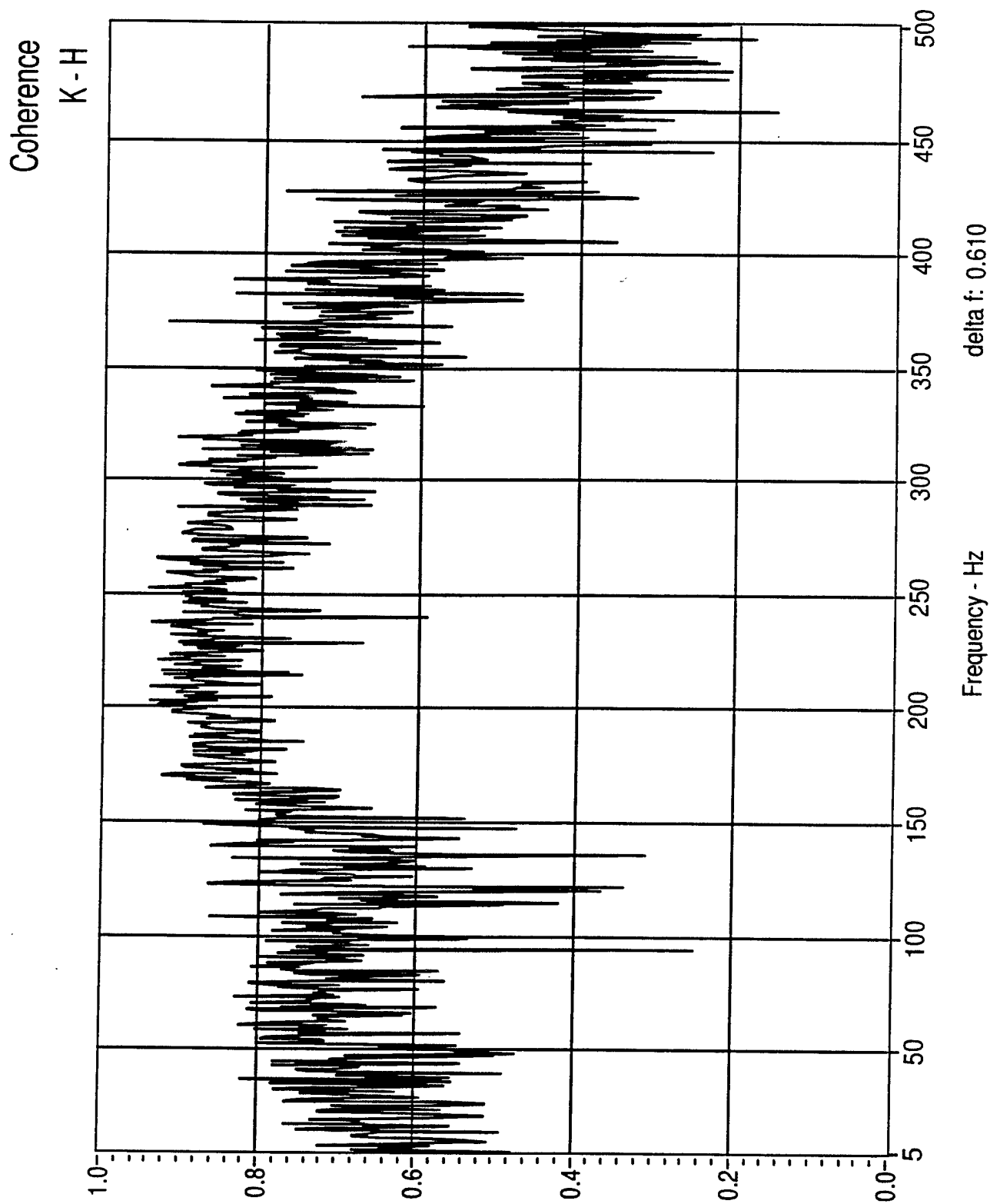
F-15 TPN\_2864: alpha=8 beta=-4 bp=0



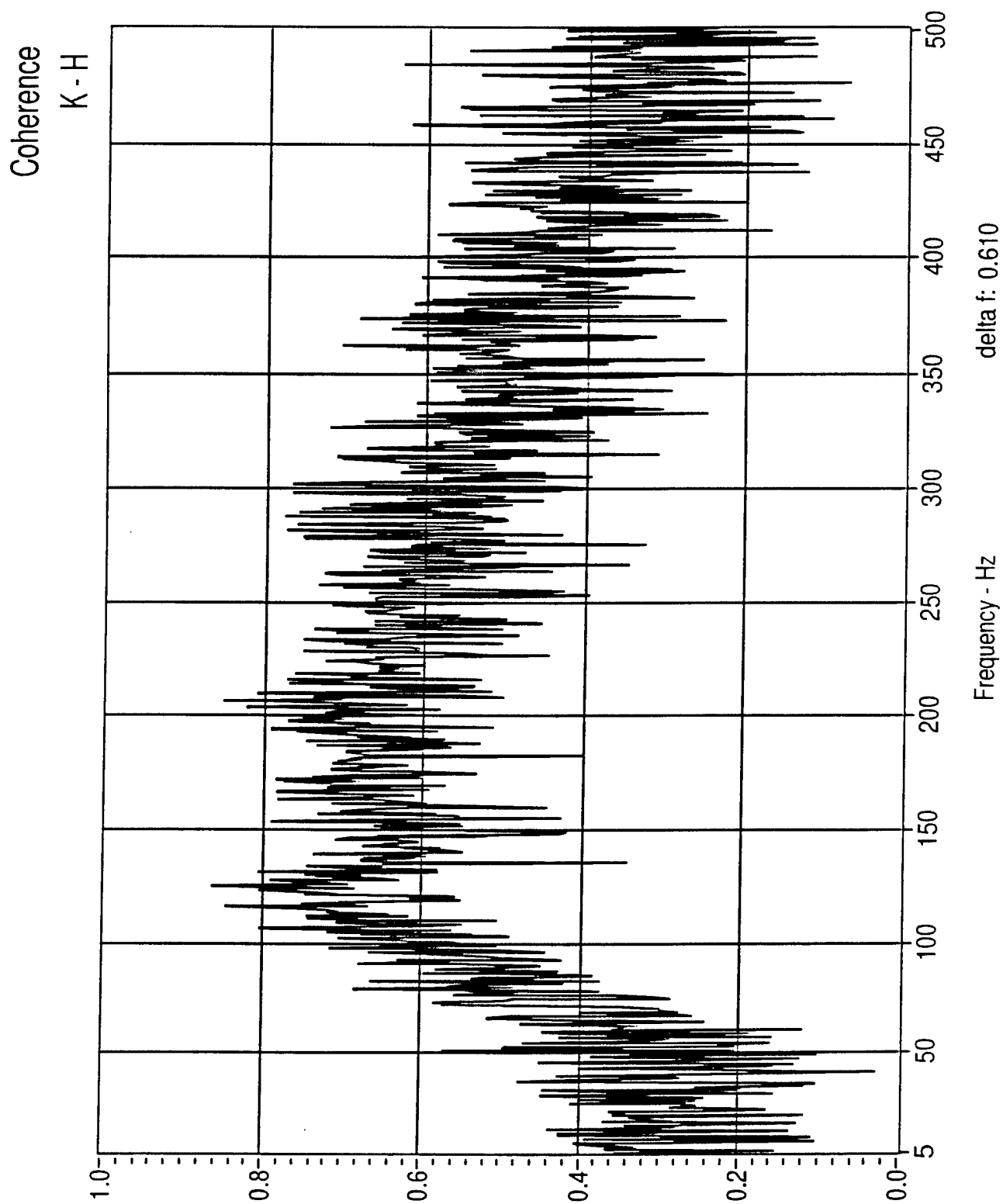
F-15 TPN\_2870: alpha=20 beta=-4 bp=0



F-15 TPN\_2872: alpha=24 beta=-4 bp=0

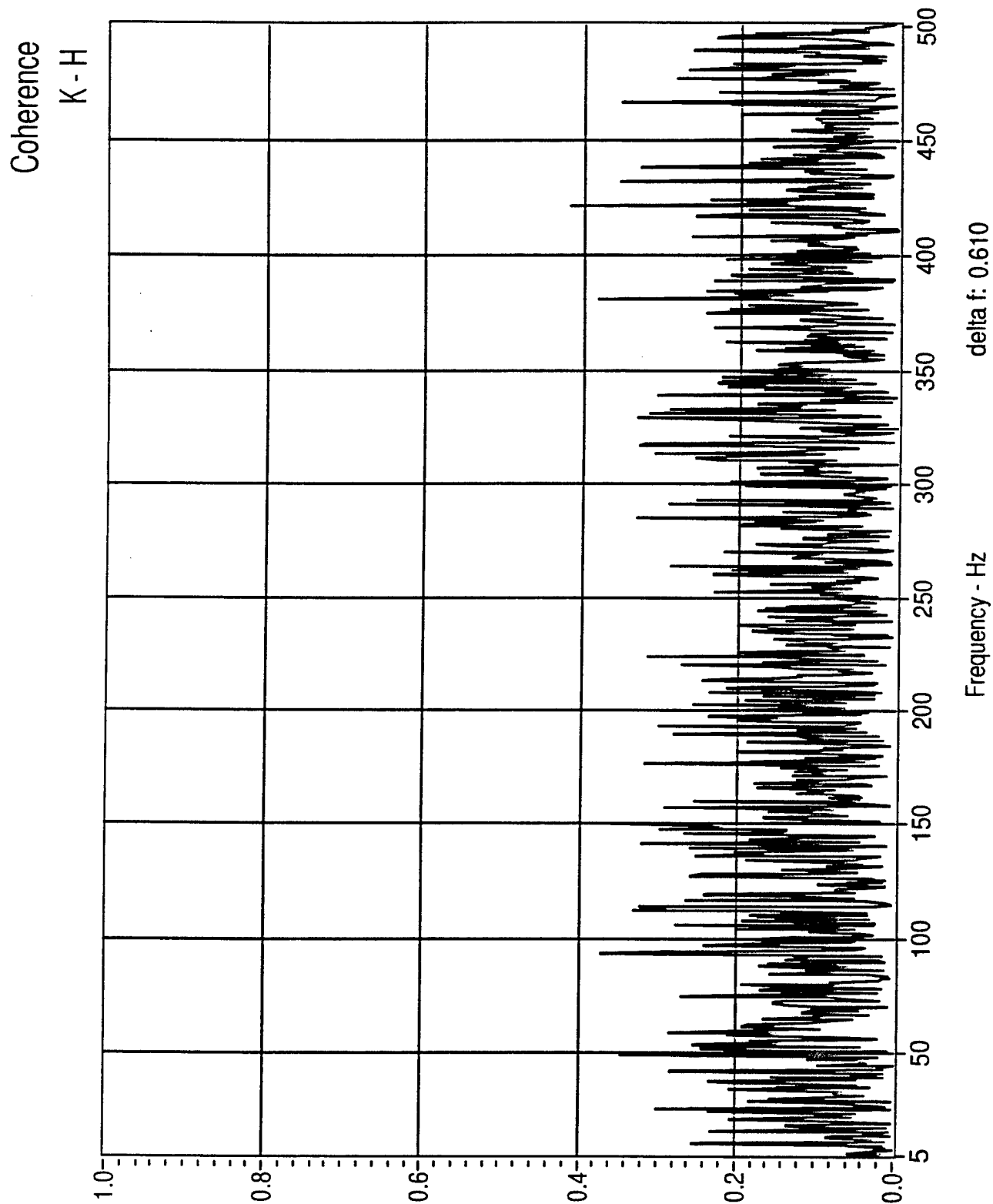


F-15 TPN\_2874: alpha=32 beta=-4 bp=0

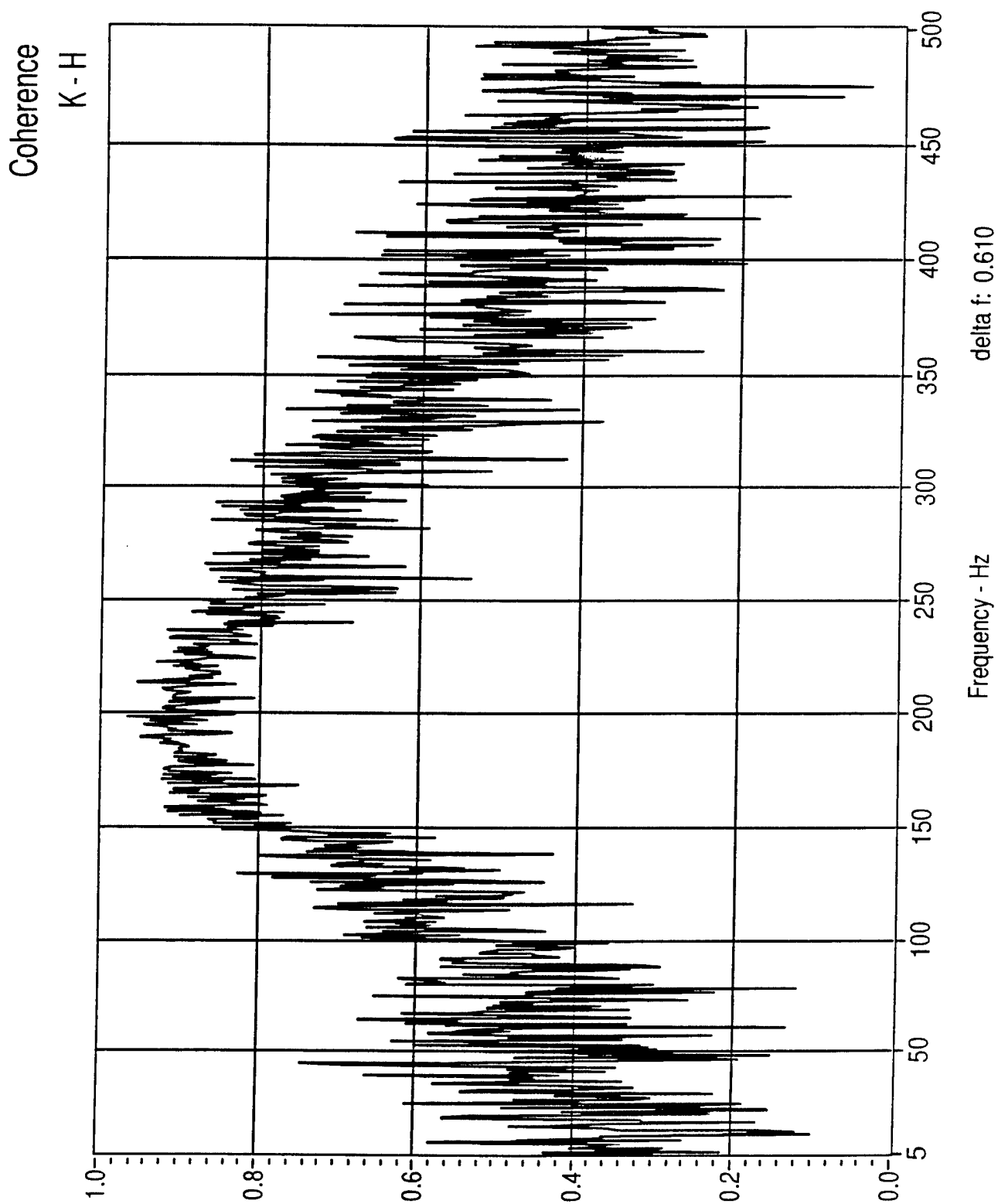




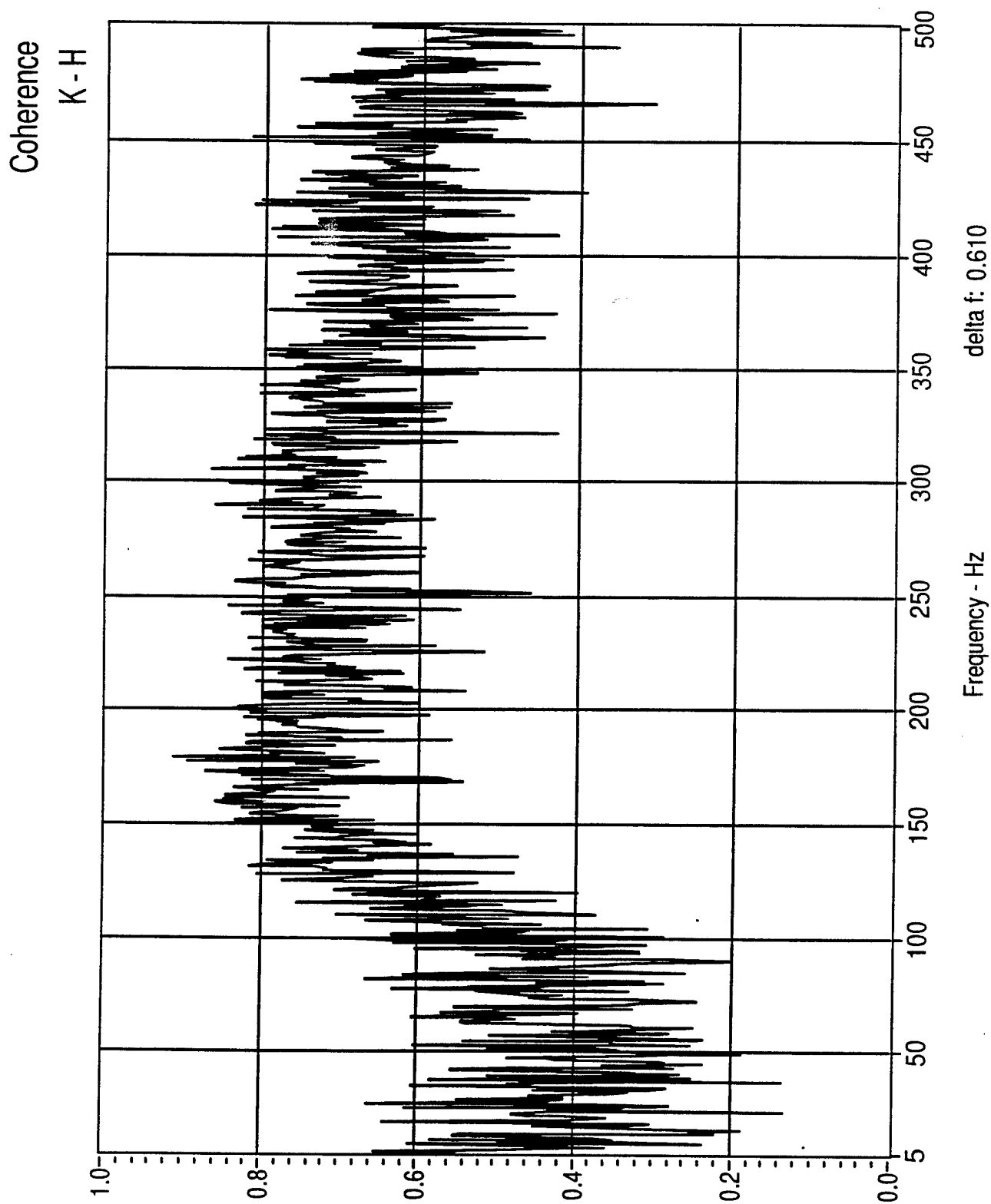
F-15 TPN\_3351: alpha=8 beta=4 bp=45



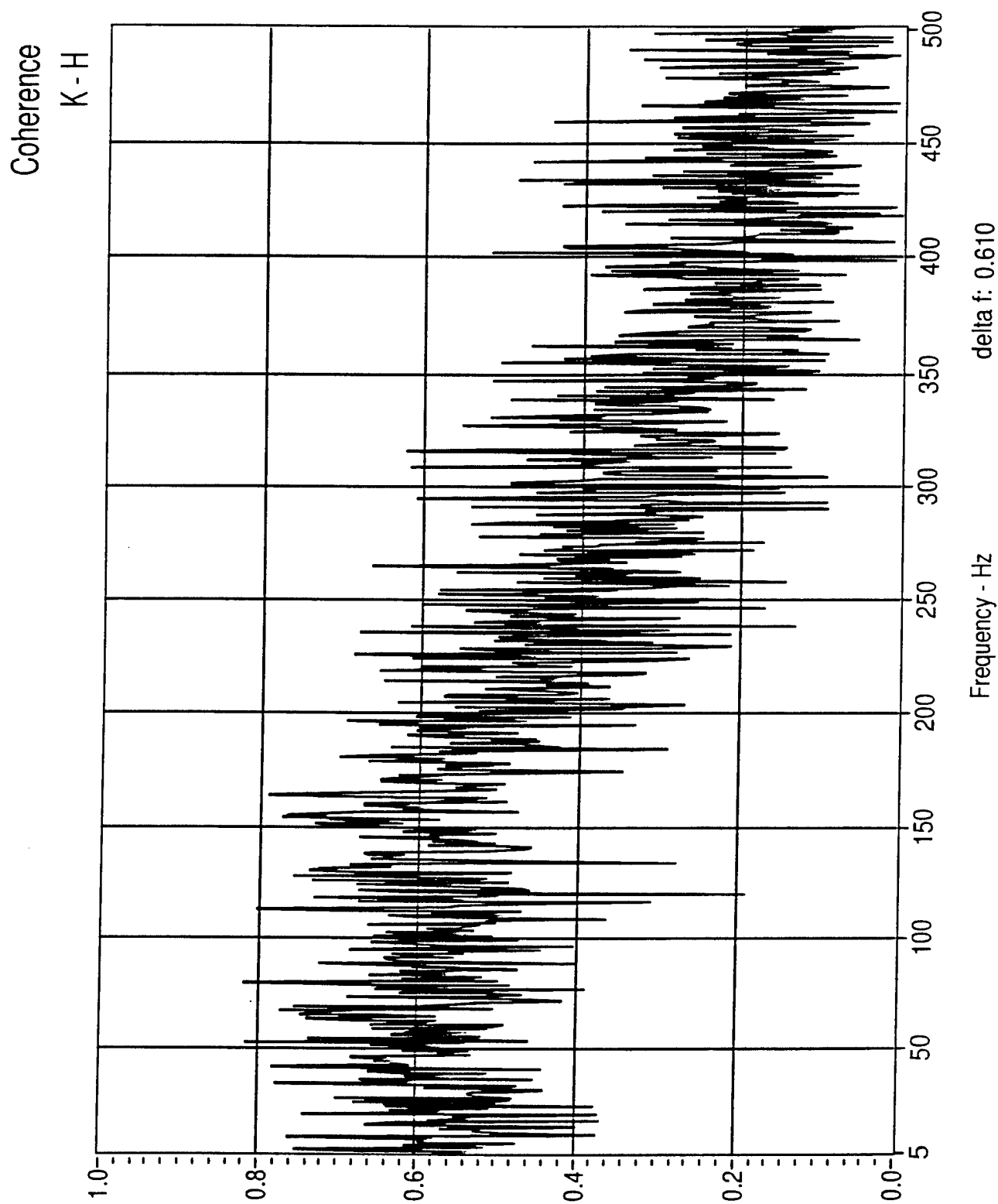
F-15 TPN\_3357: alpha=20 beta=4 bp=45



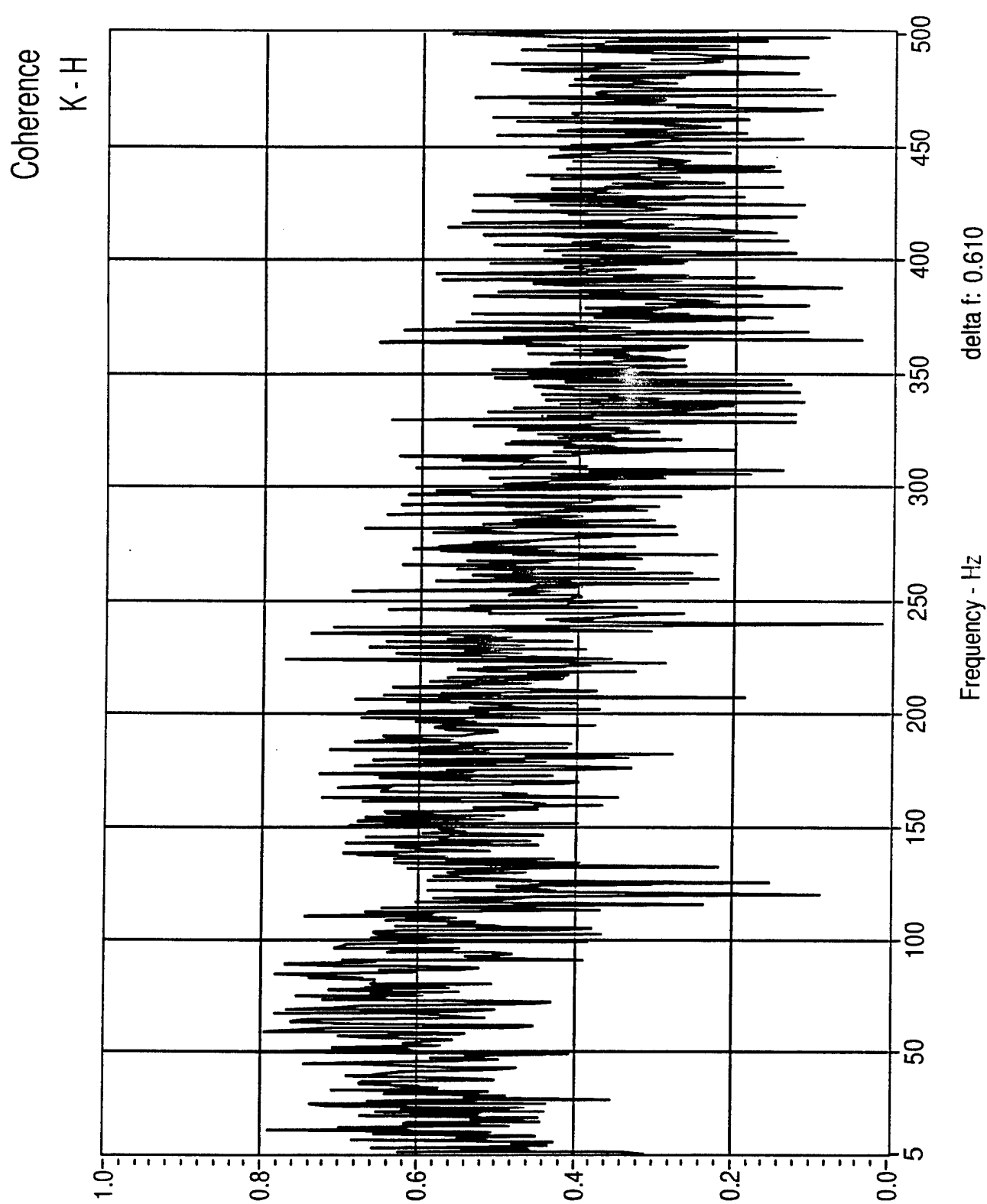
F-15 TPN\_3359:alpha=24 beta=4 bp=45



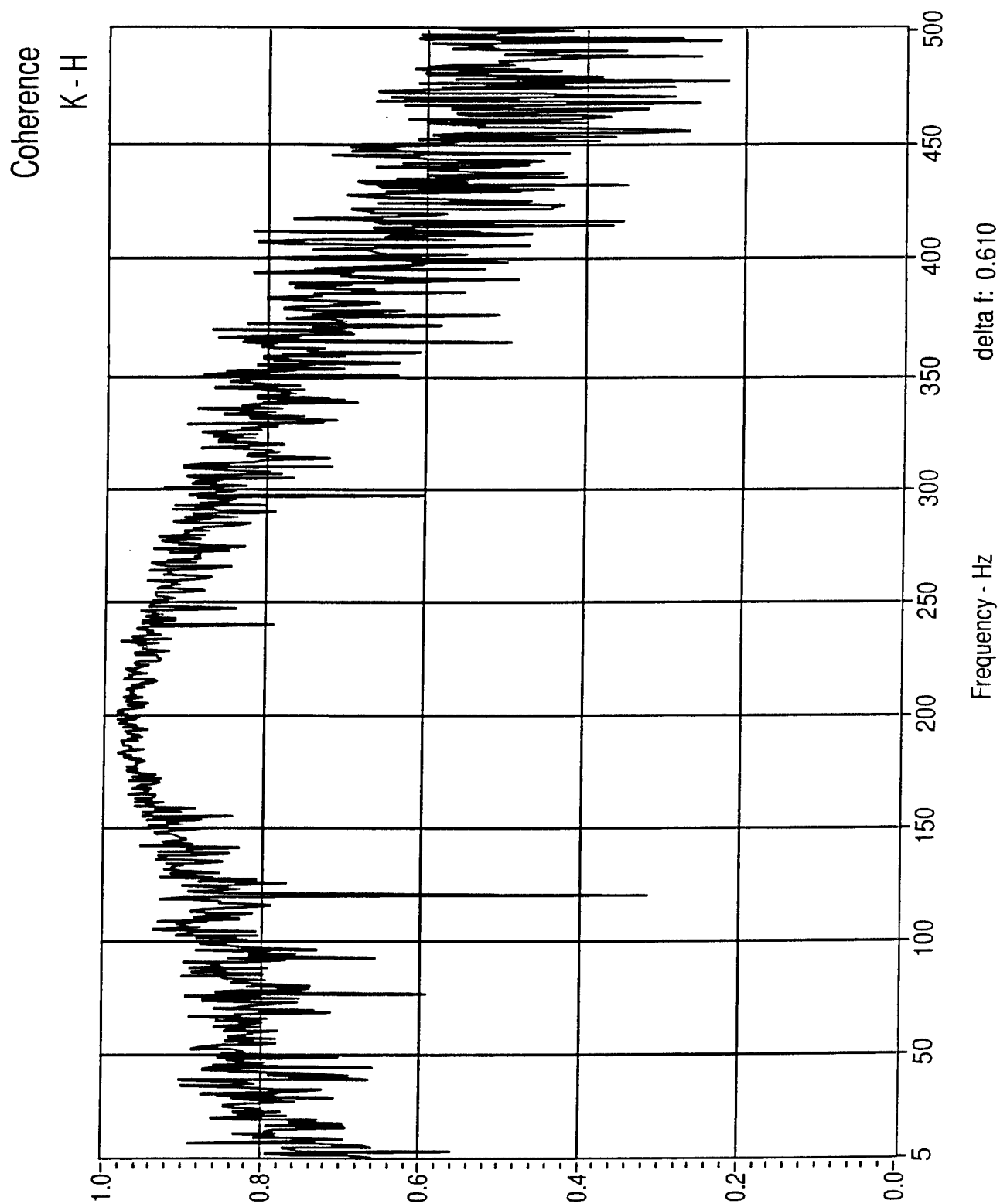
F-15 TPN\_3361: alpha=32 beta=4 bp=45



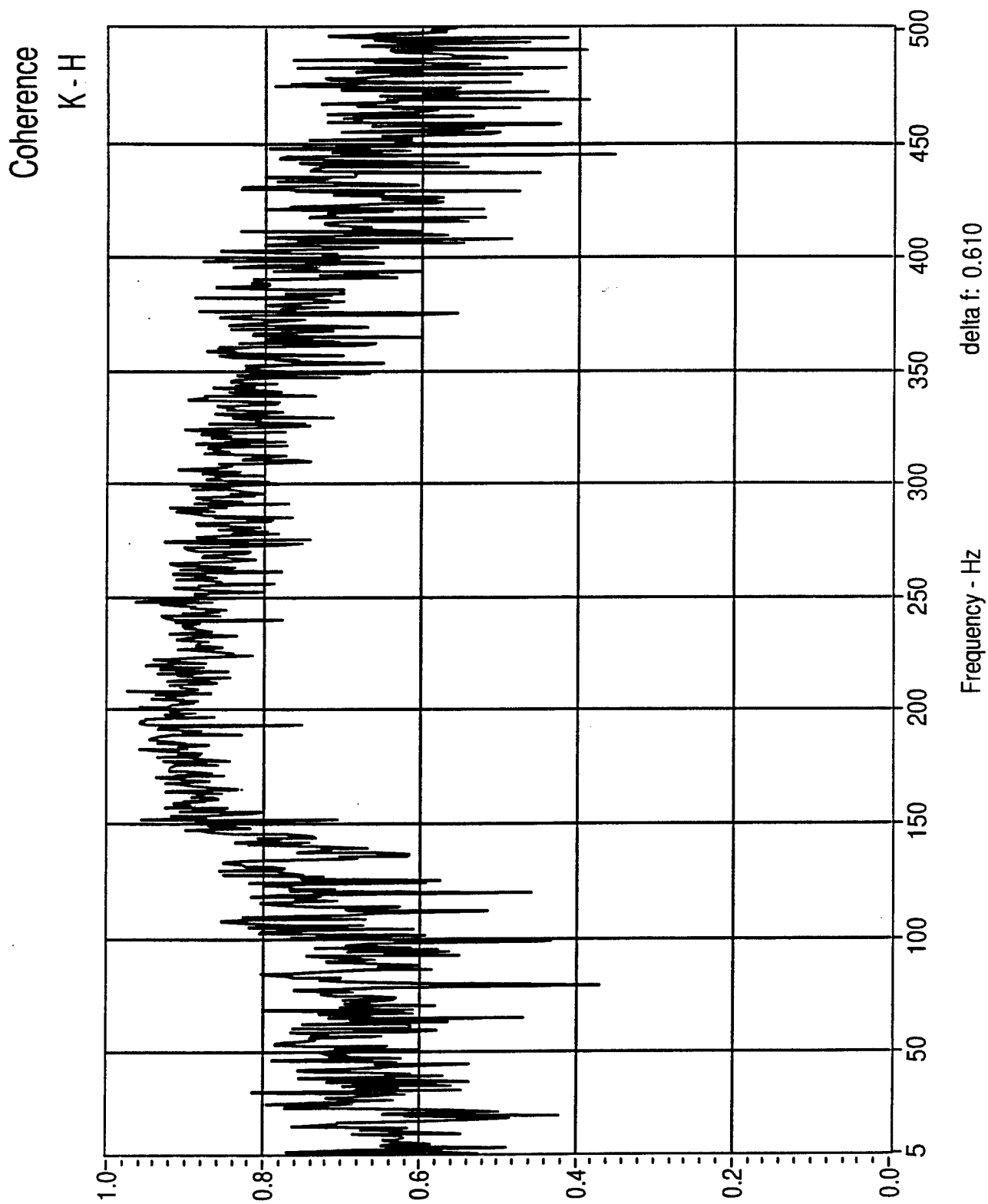
F-15 TPN\_3333: alpha=8 beta=0 bp=45



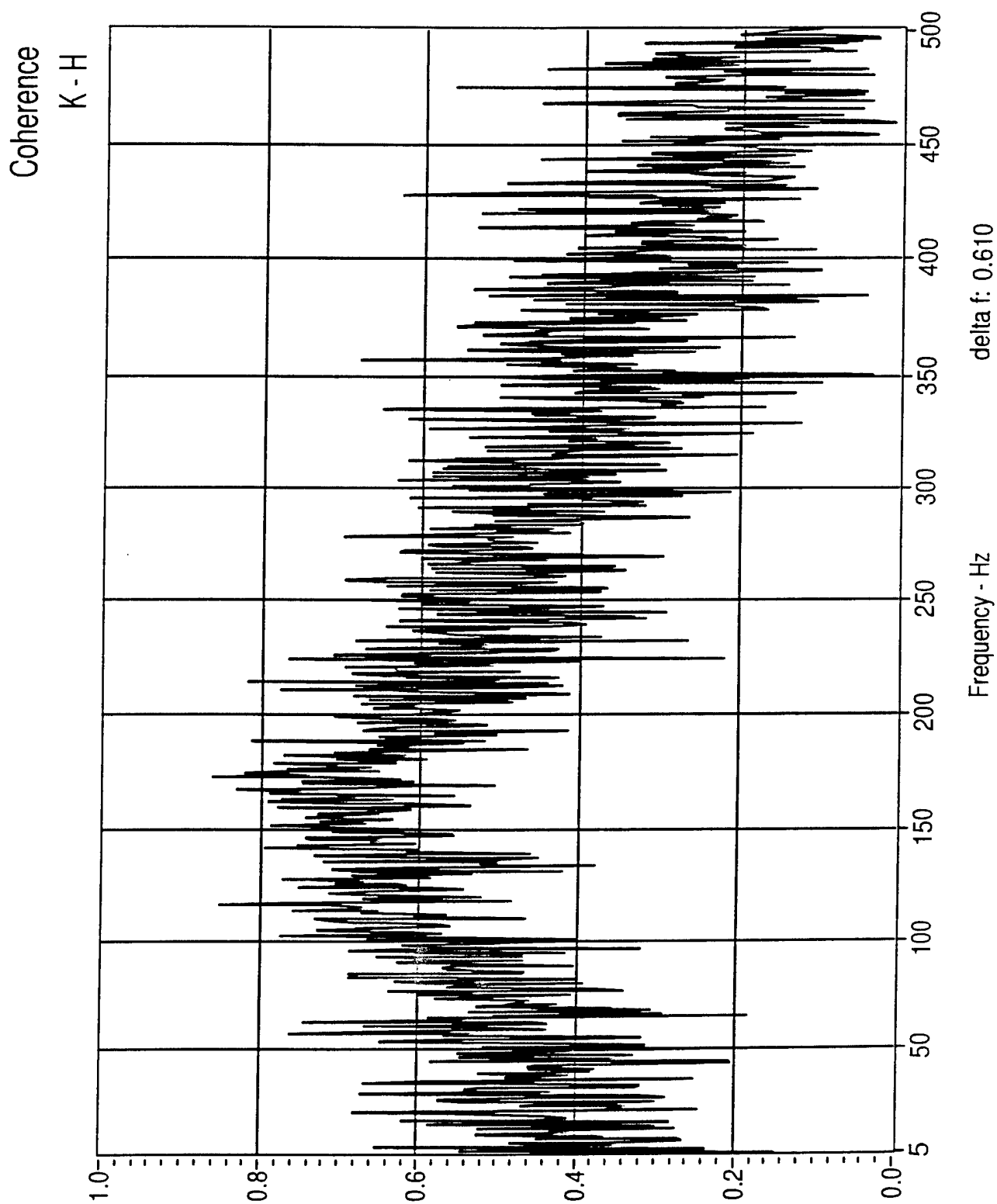
F-15 TPN\_3339: alpha=20 beta=0 bp=45



F-15 TPN\_3341: alpha=24 beta=0 bp=45

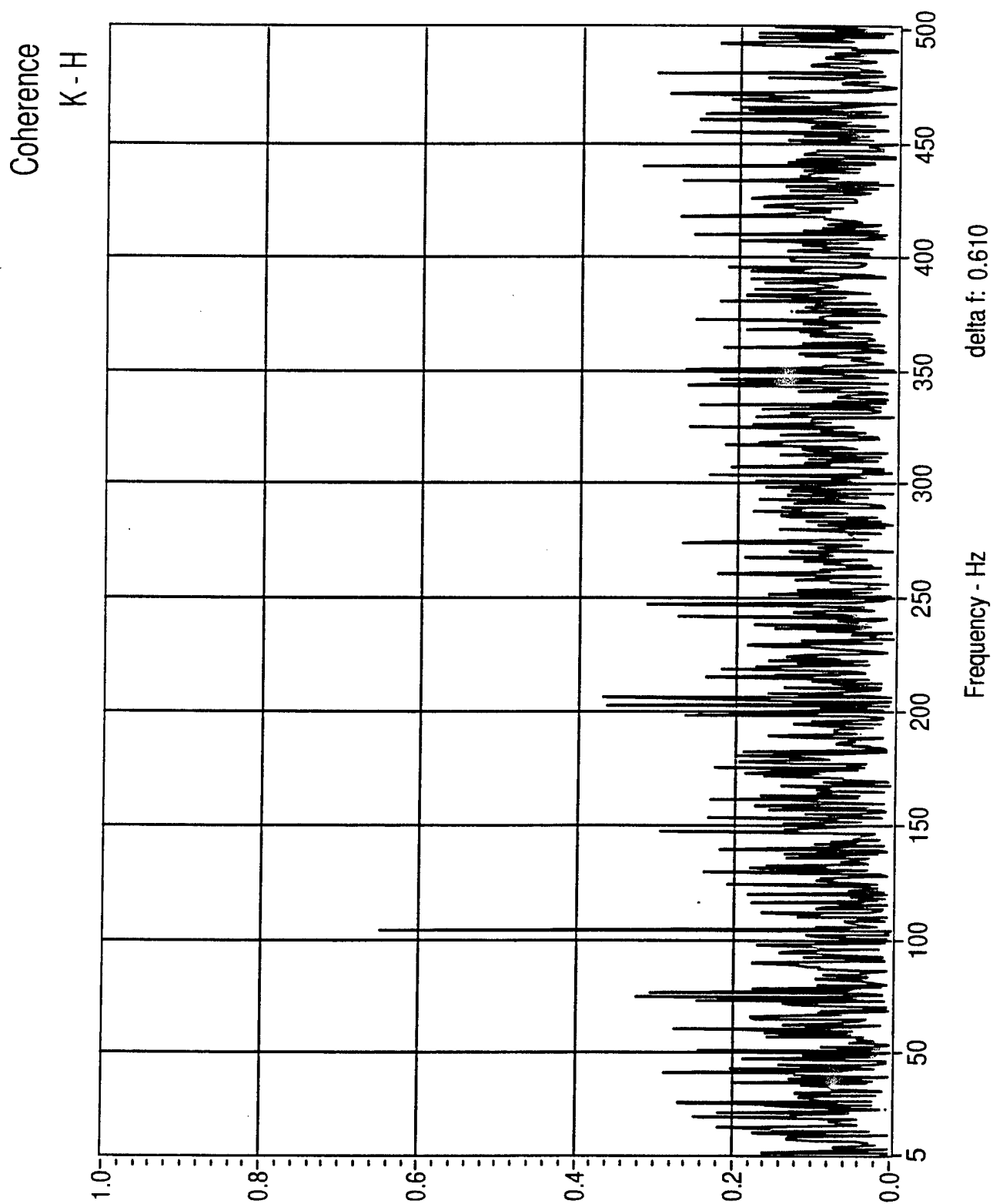


F-15 TPN\_3343: alpha=32 beta=0 bp=45

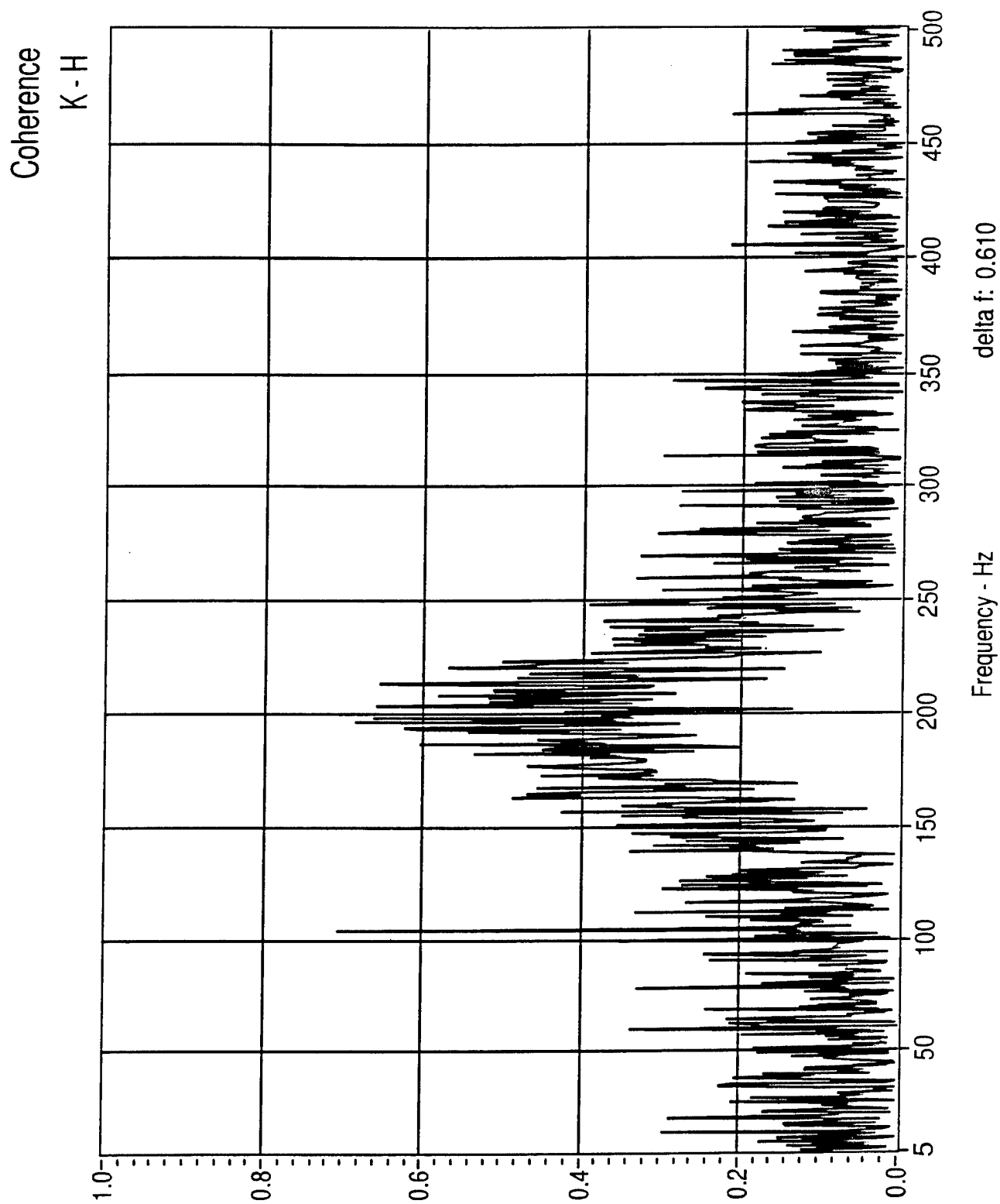




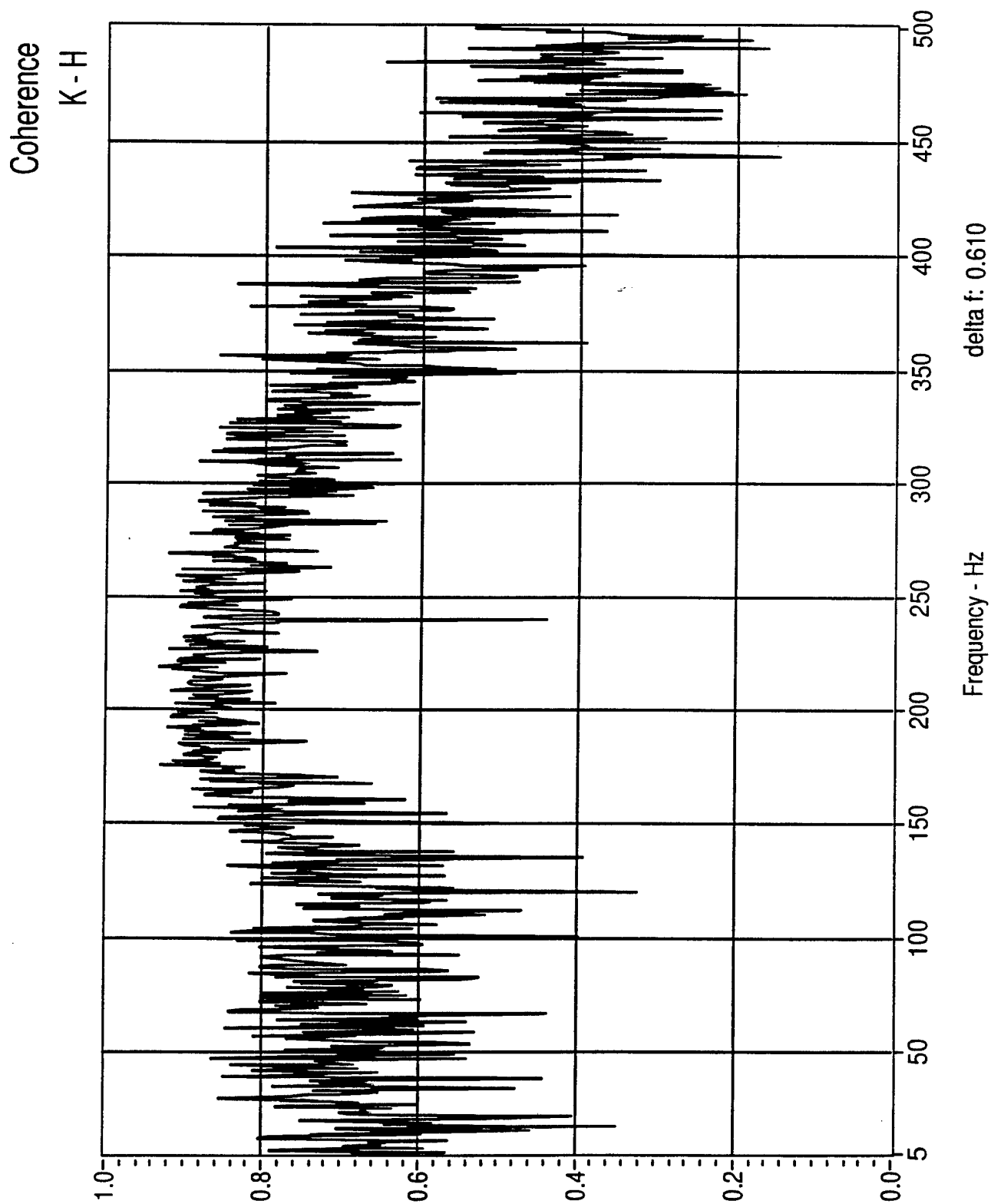
F-15 TPN\_3369: alpha=8 beta=-4 bp=45



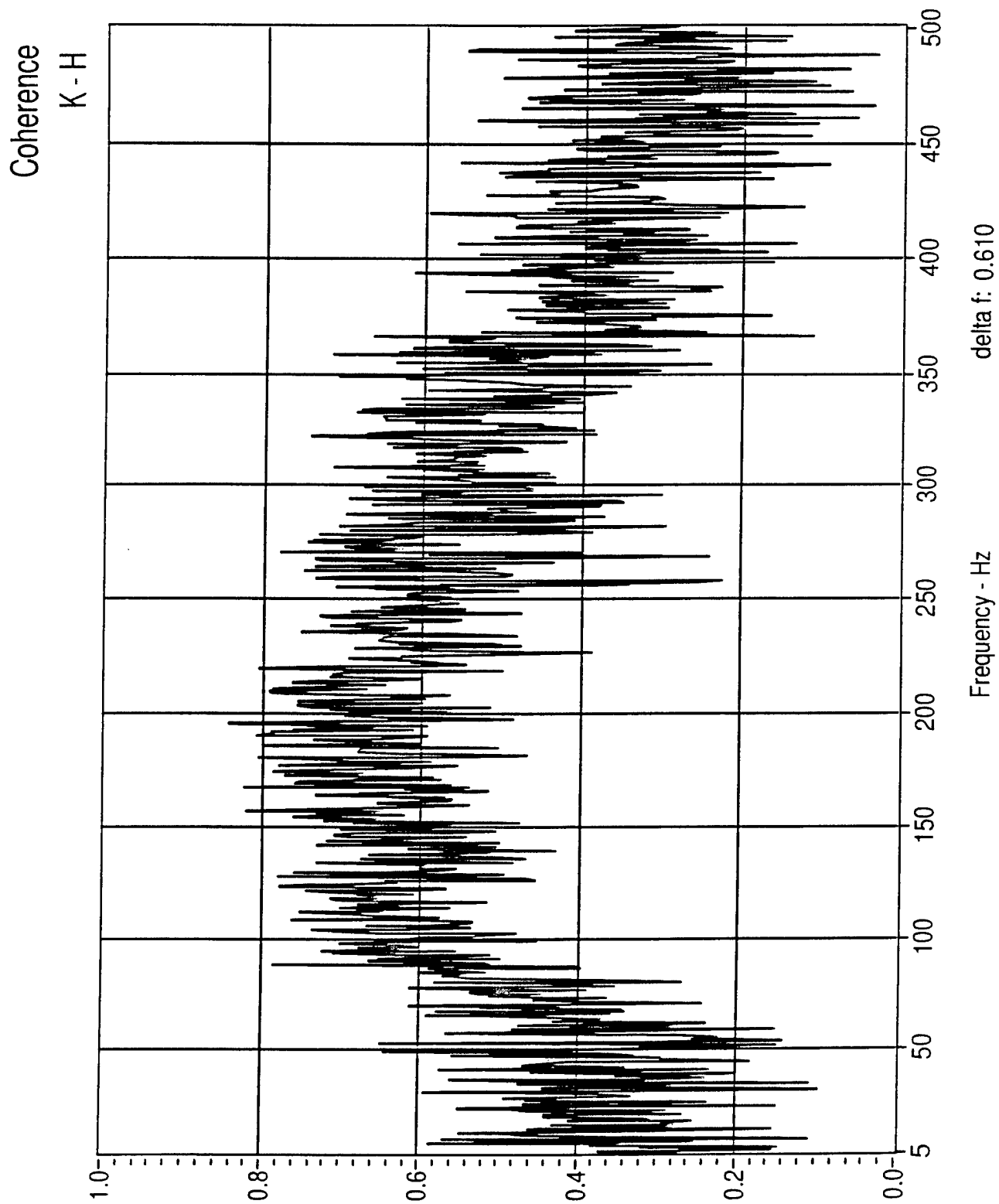
F-15 TPN\_3375: alpha=20 beta=-4 bp=45



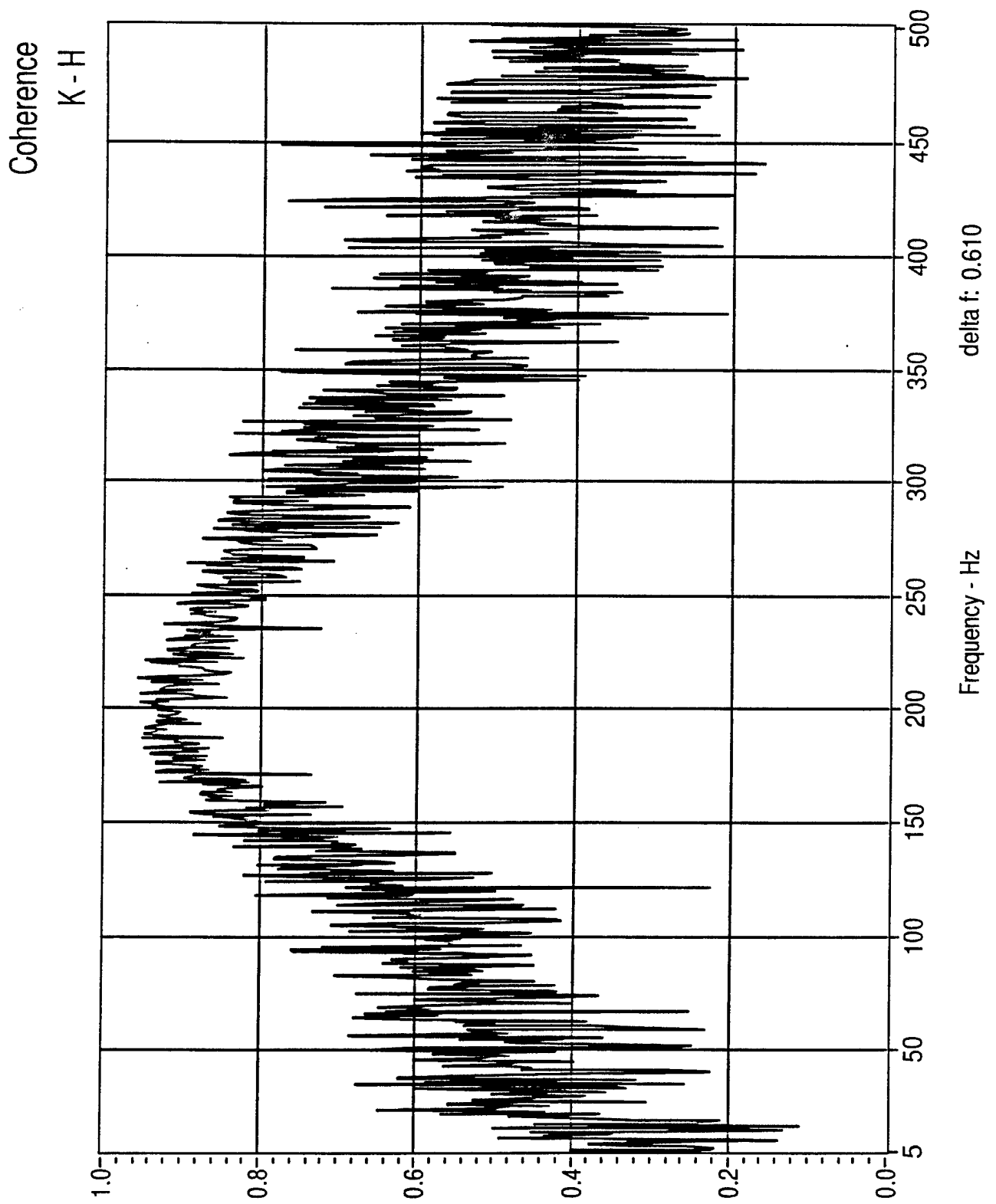
F-15 TPN\_3377: alpha=24 beta=-4 bp=45



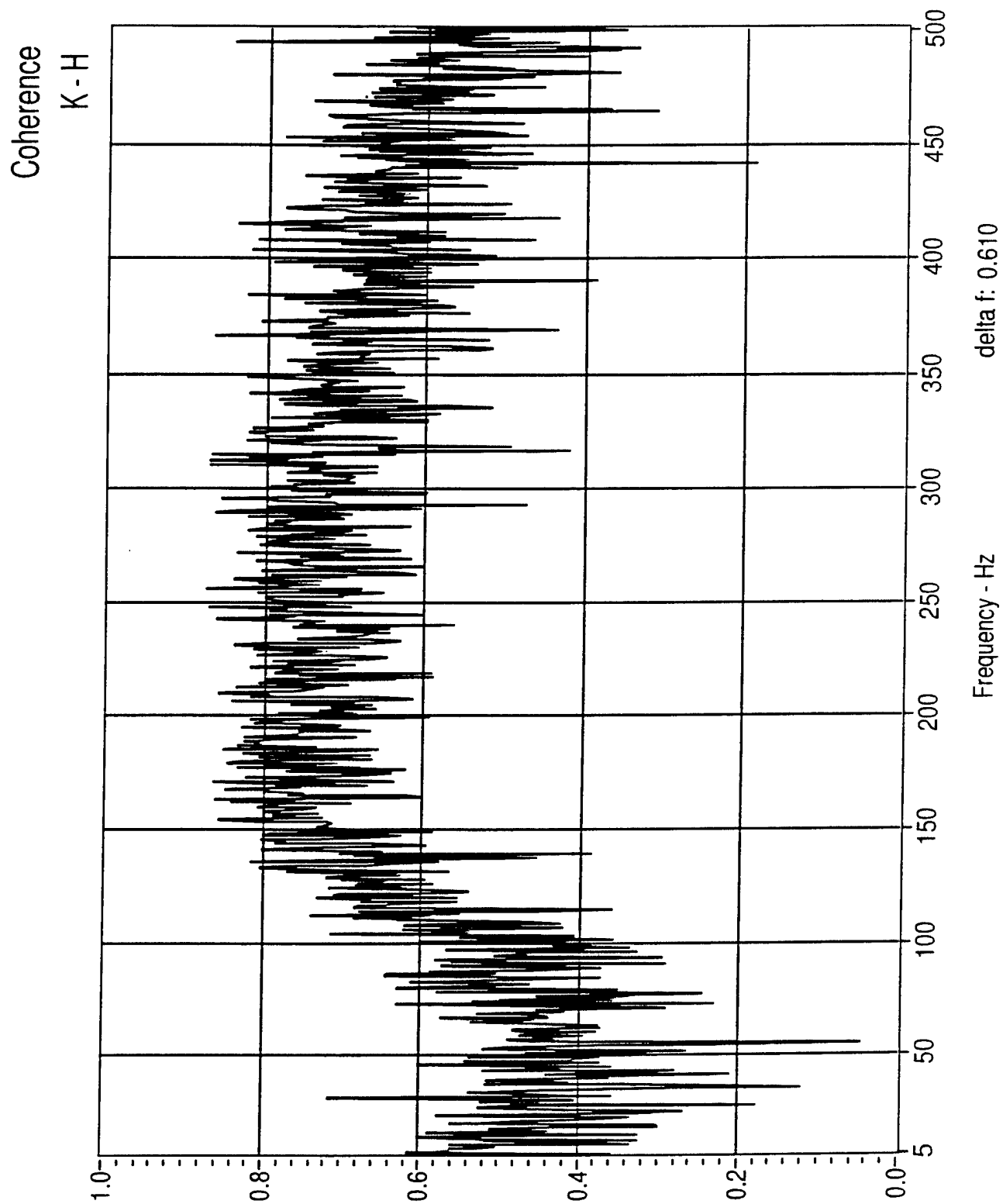
F-15 TPN\_3379: alpha=32 beta=-4 bp=45



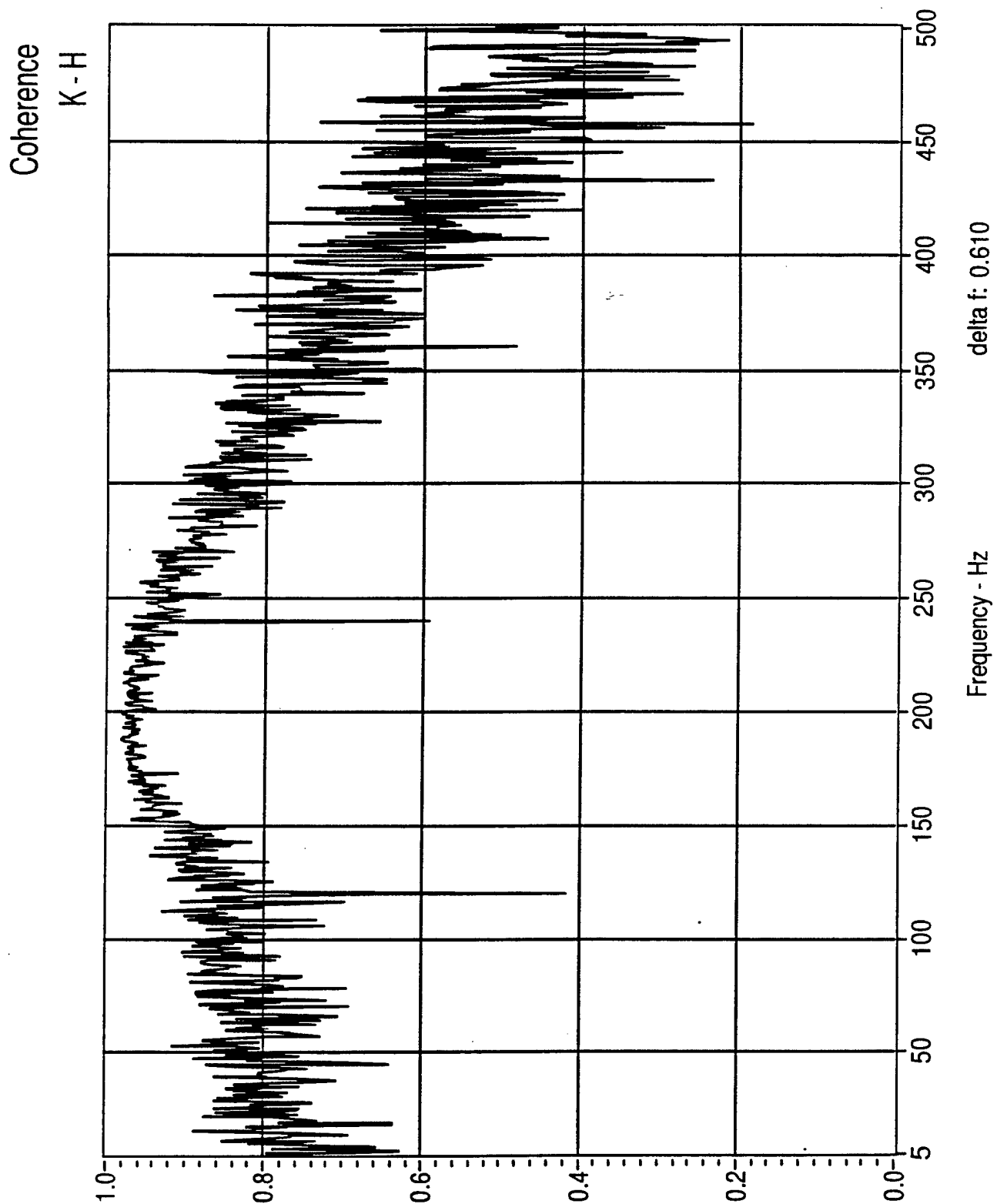
F-15 TPN\_3046: alpha=20 beta=4 bp=65



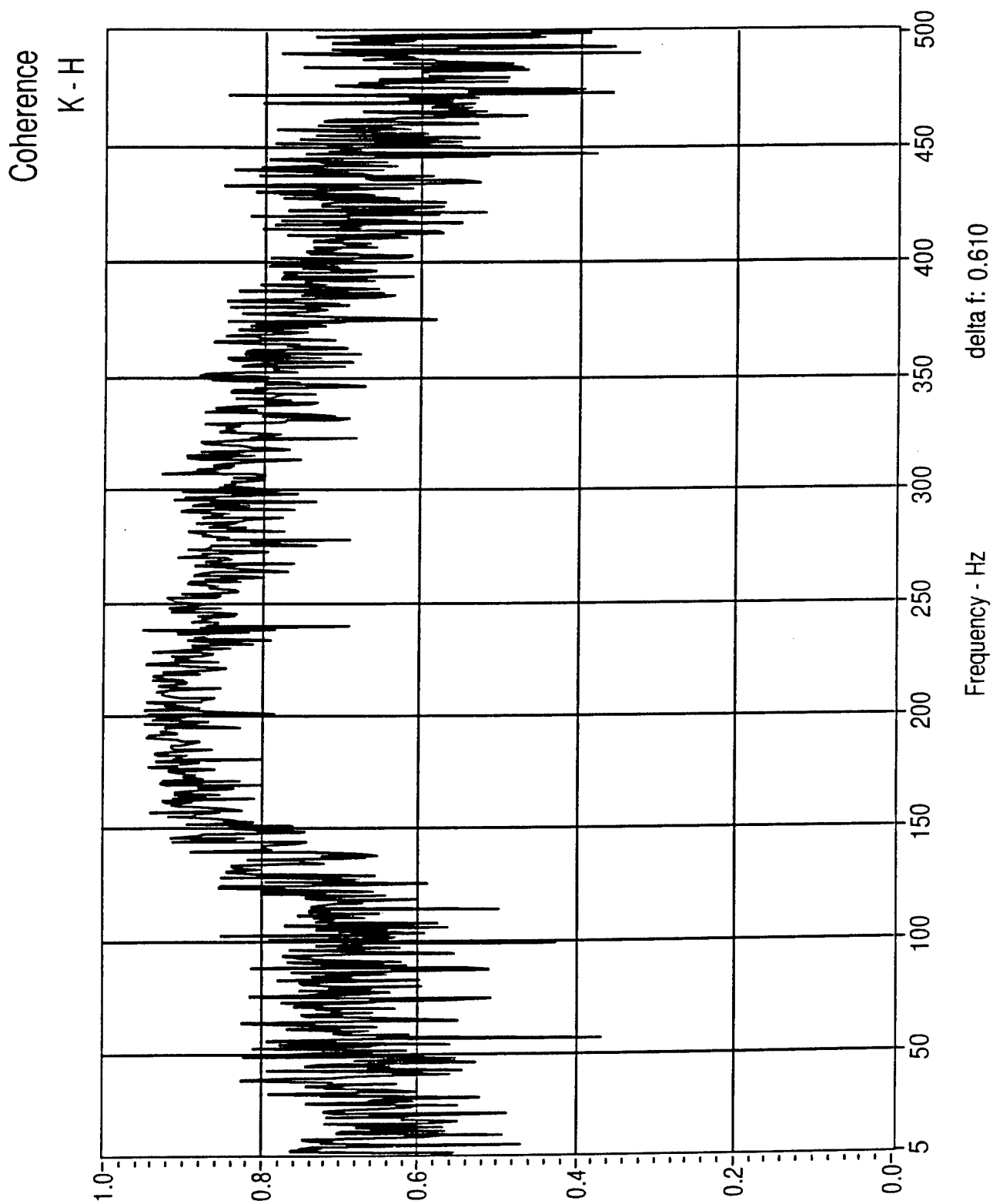
F-15 TPN\_3048: alpha=24 beta=4 bp=65



F-15 TPN\_3040: alpha=20 beta=0 bp=65

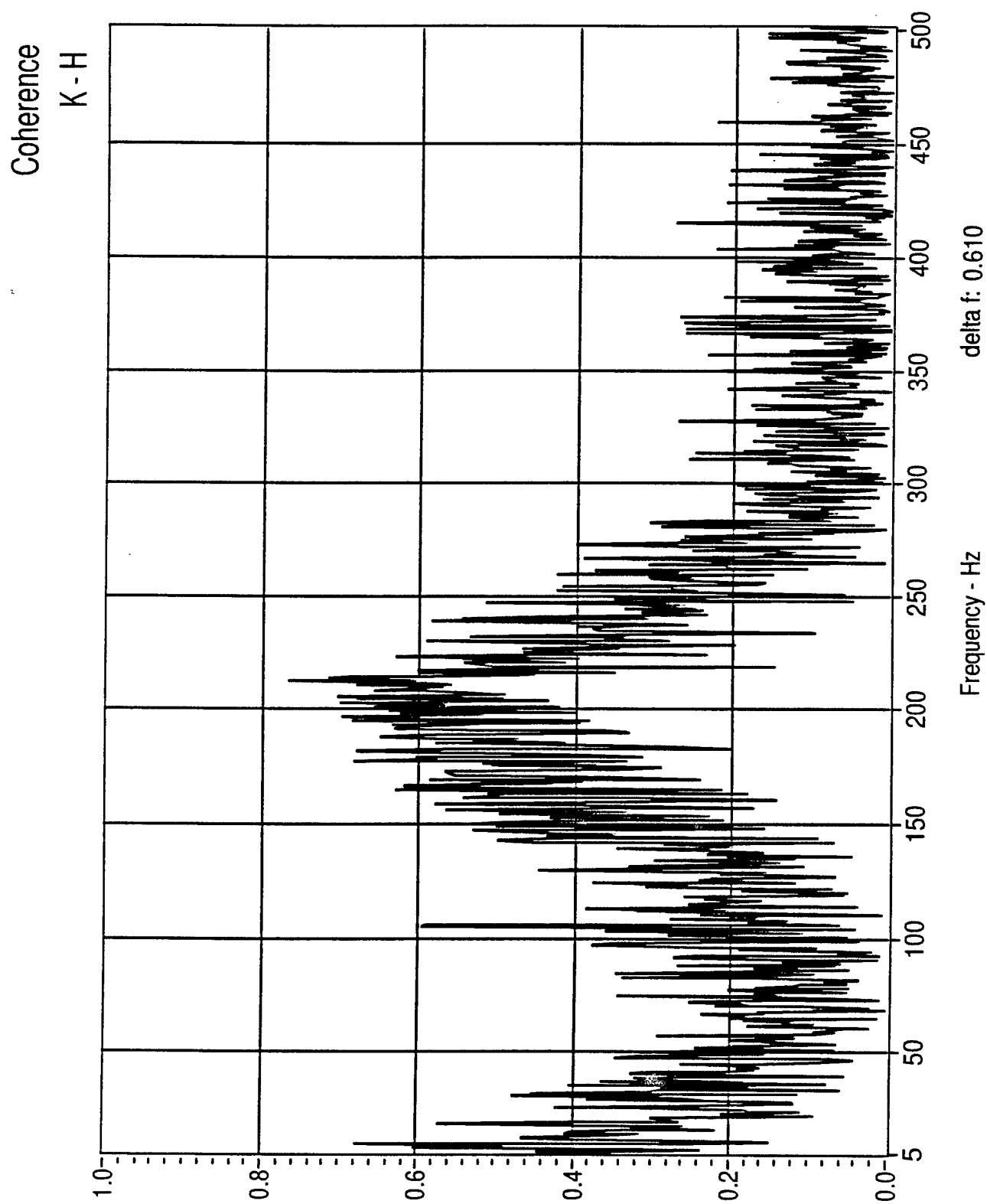


F-15 TPN\_3042: alpha=24 beta=0 bp=65

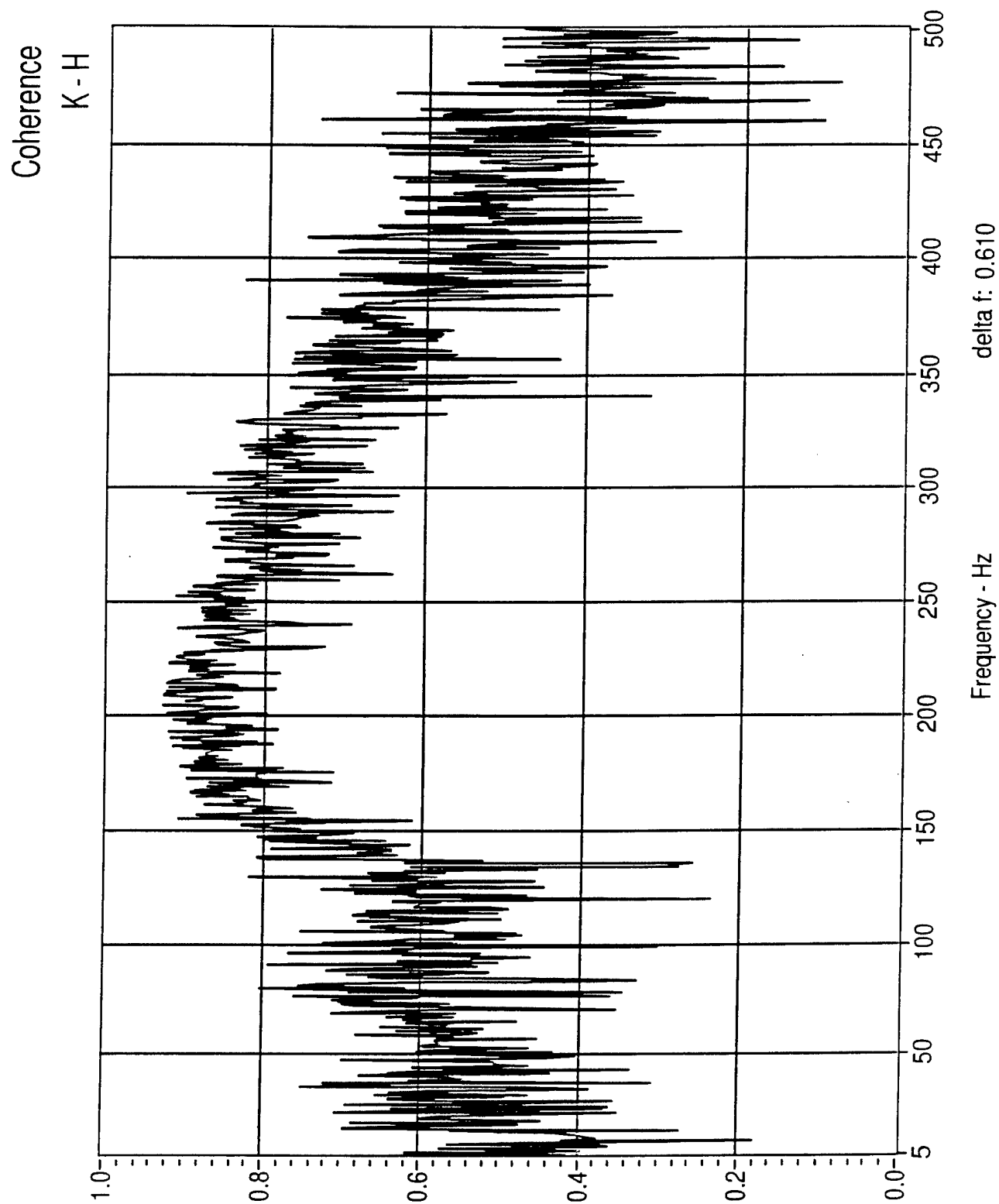




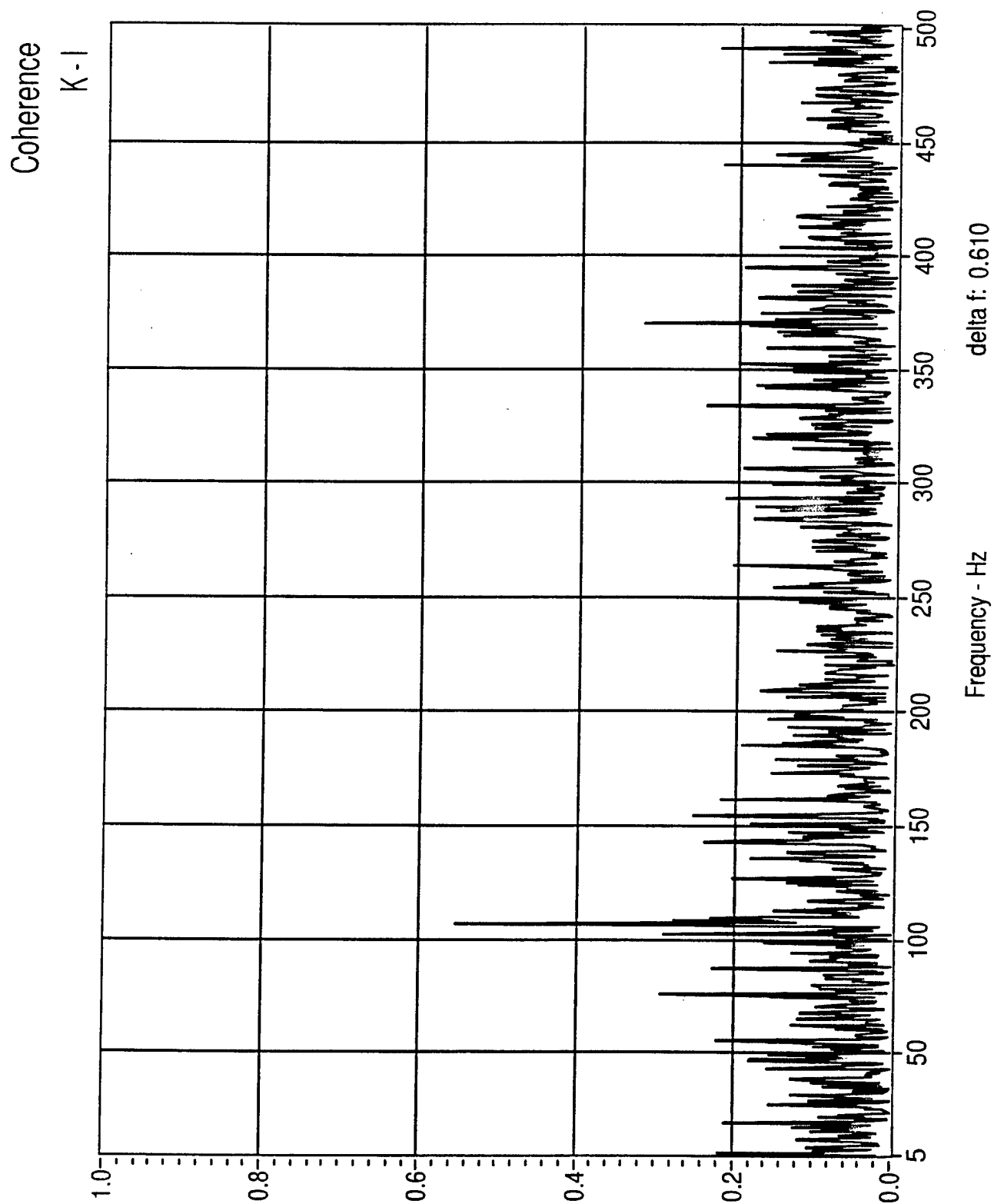
F-15 TPN\_3034: alpha=20 beta=-4 bp=6L



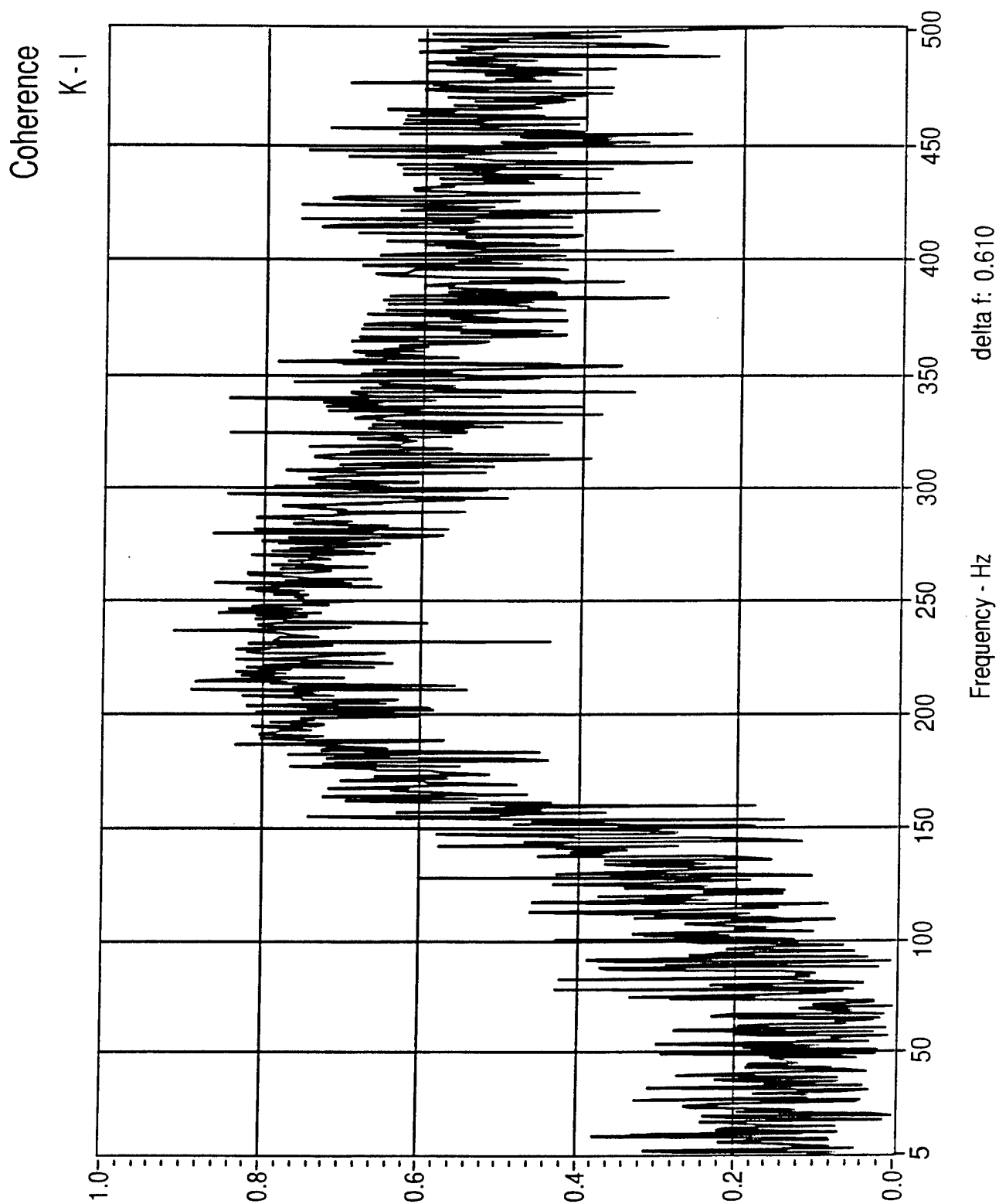
F-15 TPN\_3036: alpha=24 beta=-4 bp=65



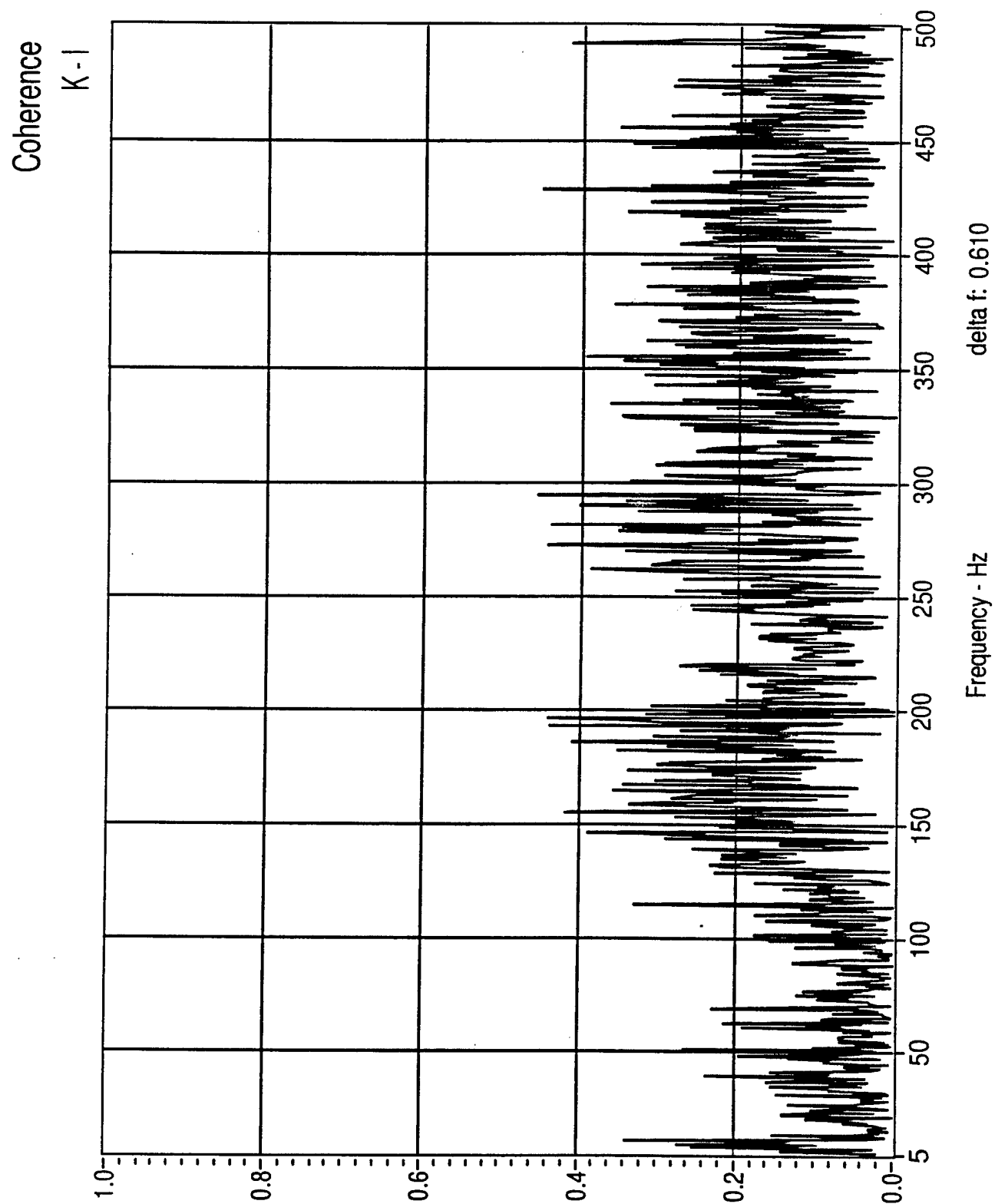
F-15 TPN\_2918:  $\alpha=8$   $\beta=4$   $\beta=0$



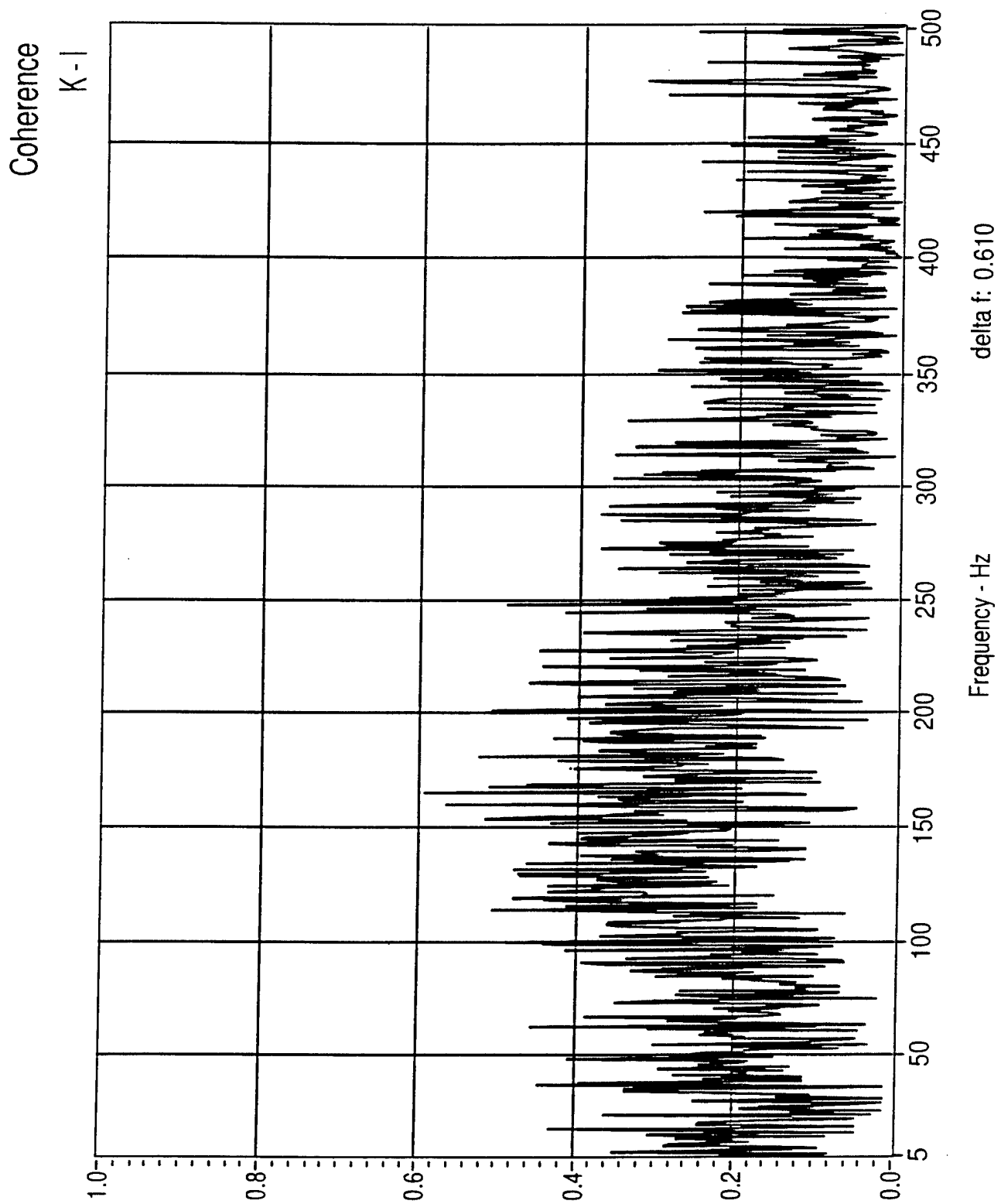
F-15 TPN\_2924: alpha=20 beta=4 bp=0



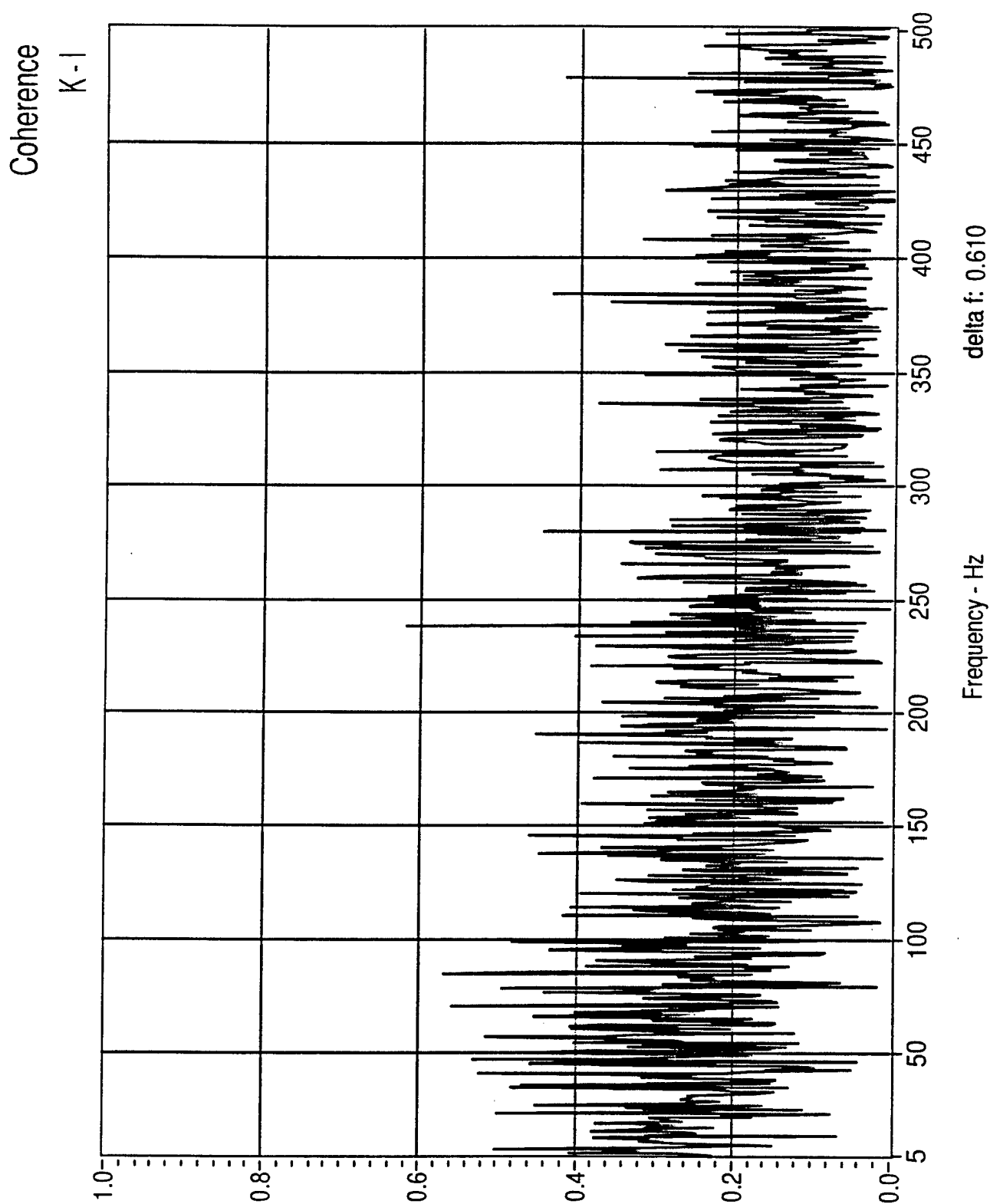
F-15 TPN\_2926: alpha=24 beta=4 bp=0



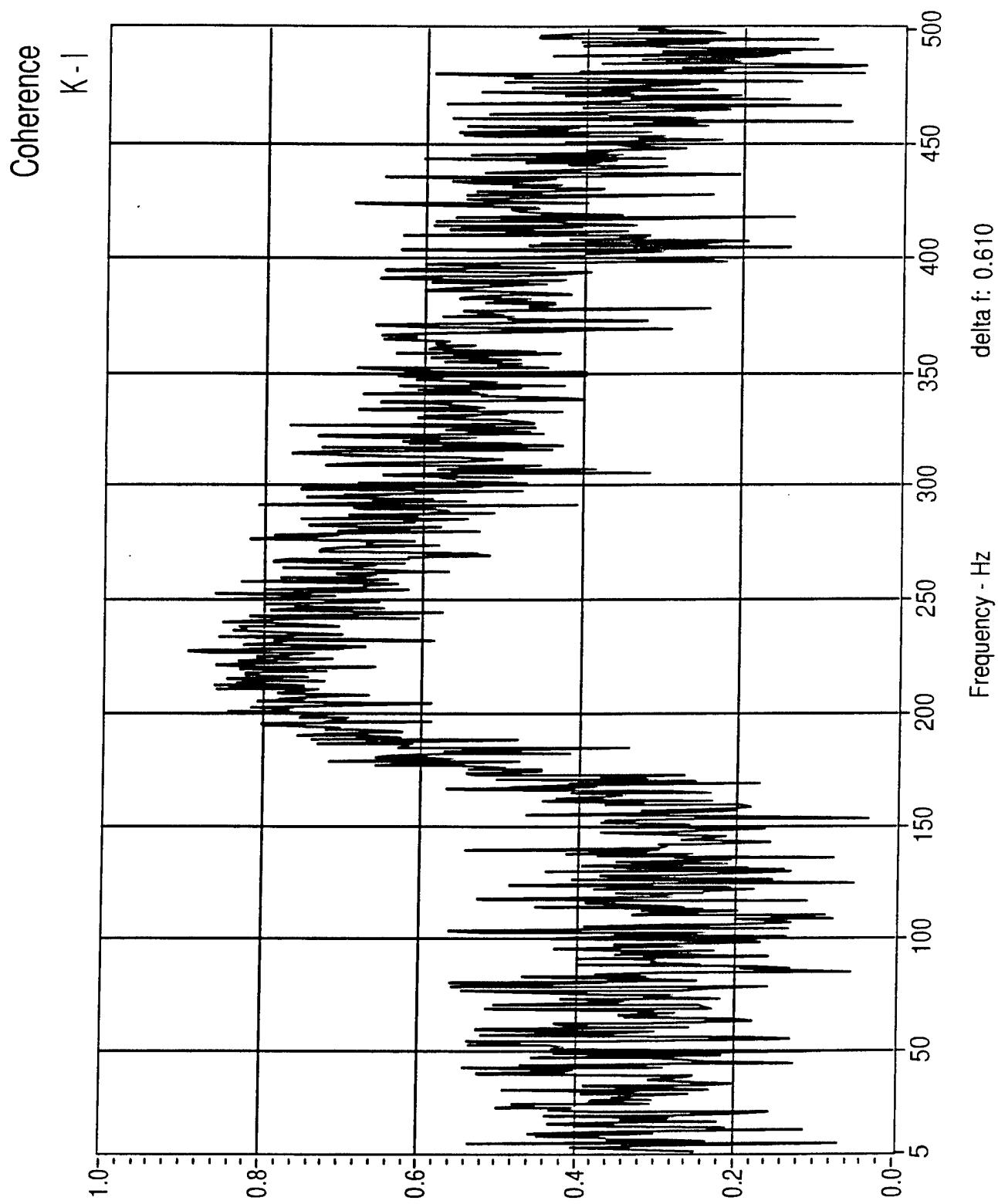
F-15 TPN\_2928: alpha=32 beta=4 bp=0



F-15 TPN\_2844: alpha=8 beta=0 bp=0

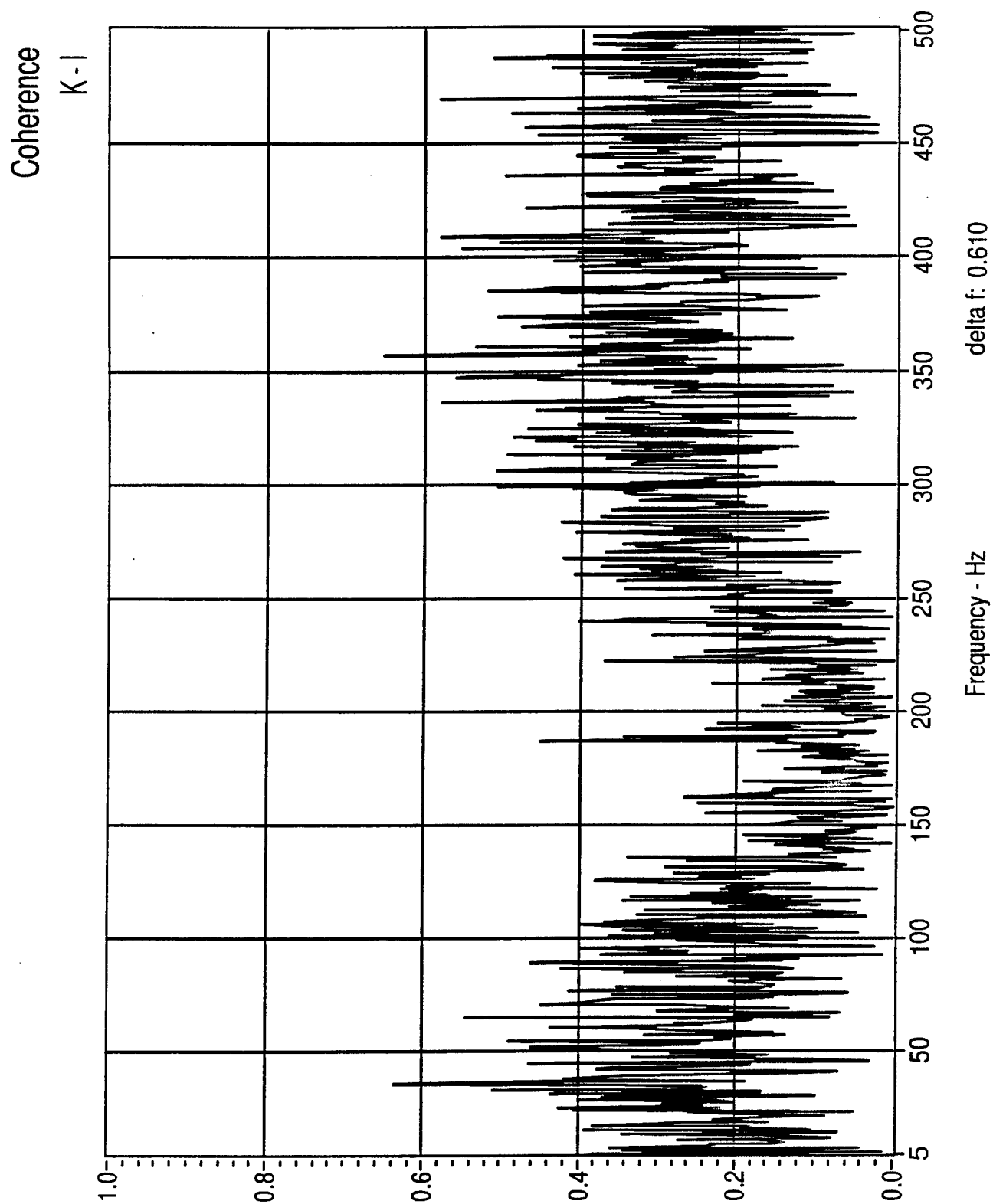


F-15 TPN\_2850: alpha=20 beta=0 bp=0

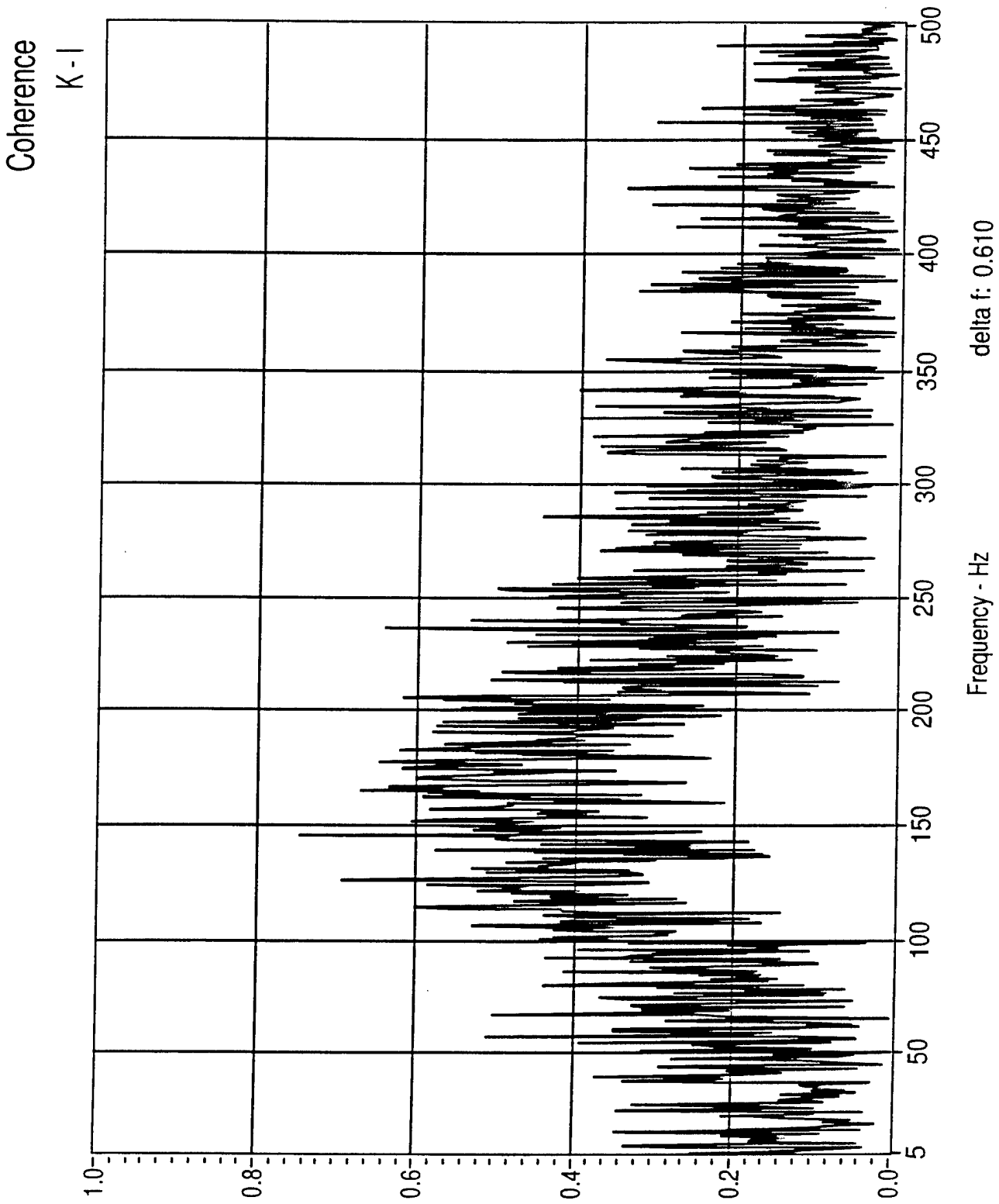




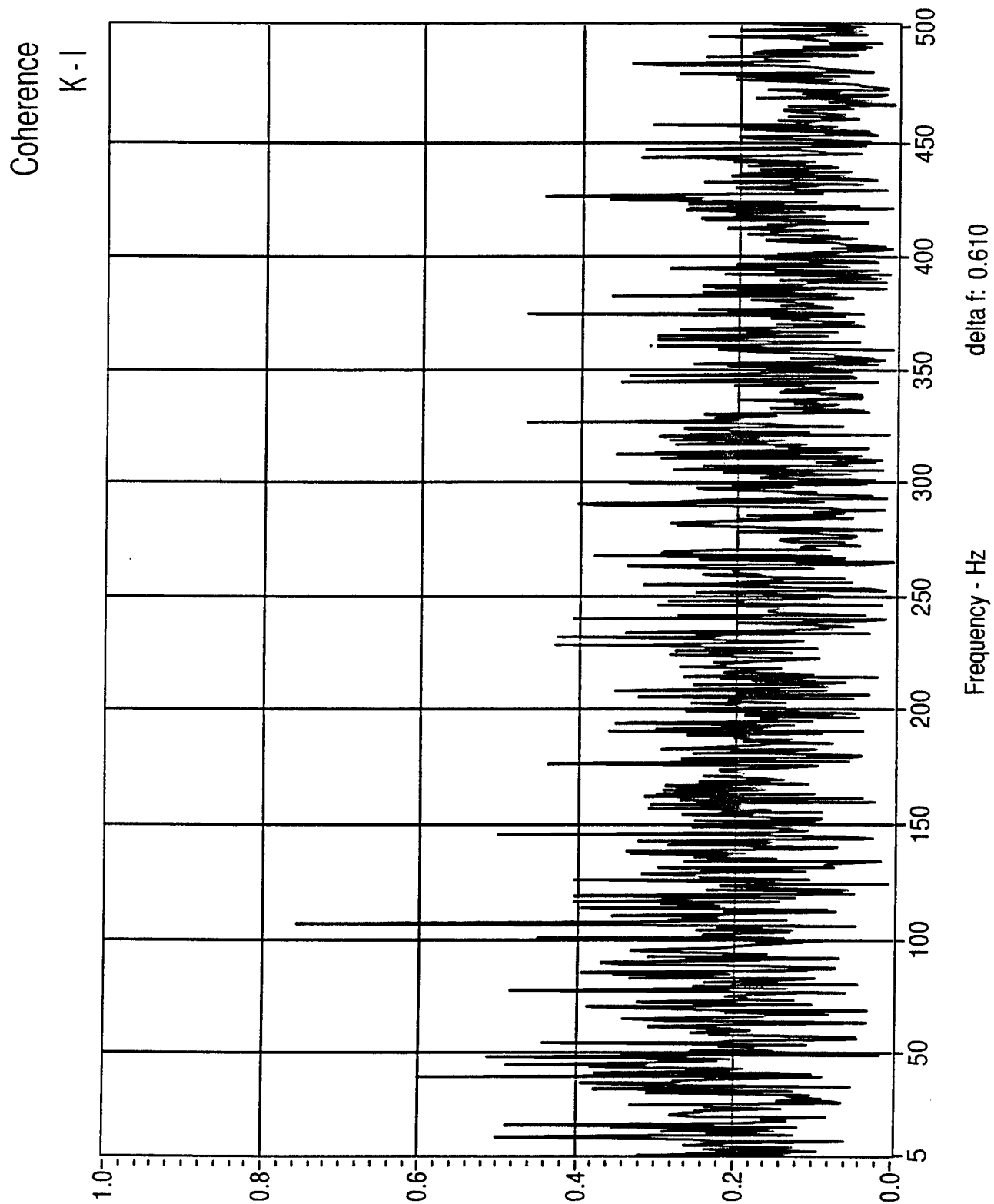
F-15 TPN\_2852: alpha=24 beta=0 bp=0



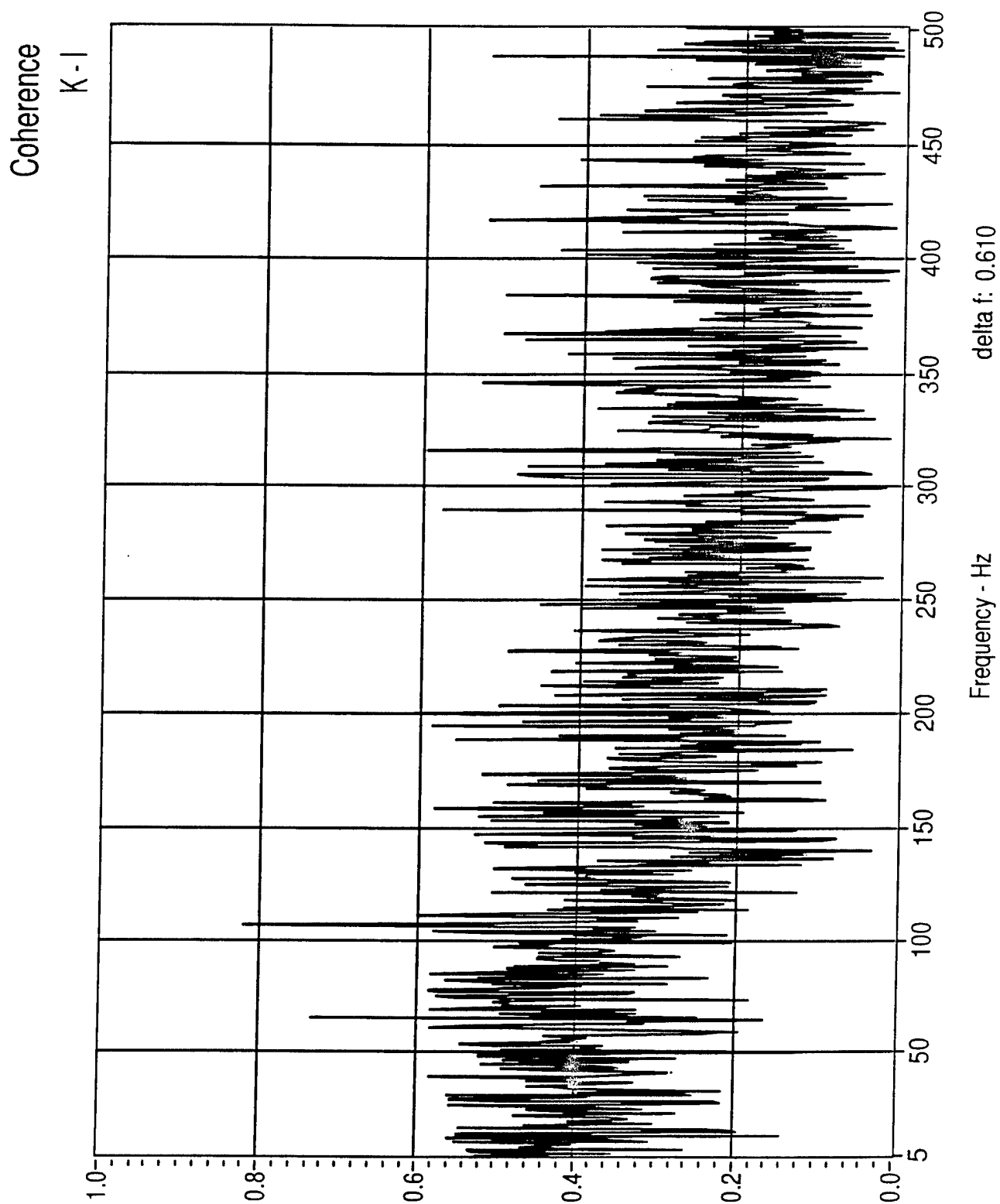
F-15 TPN\_2854: alpha=32 beta=0 bp=0



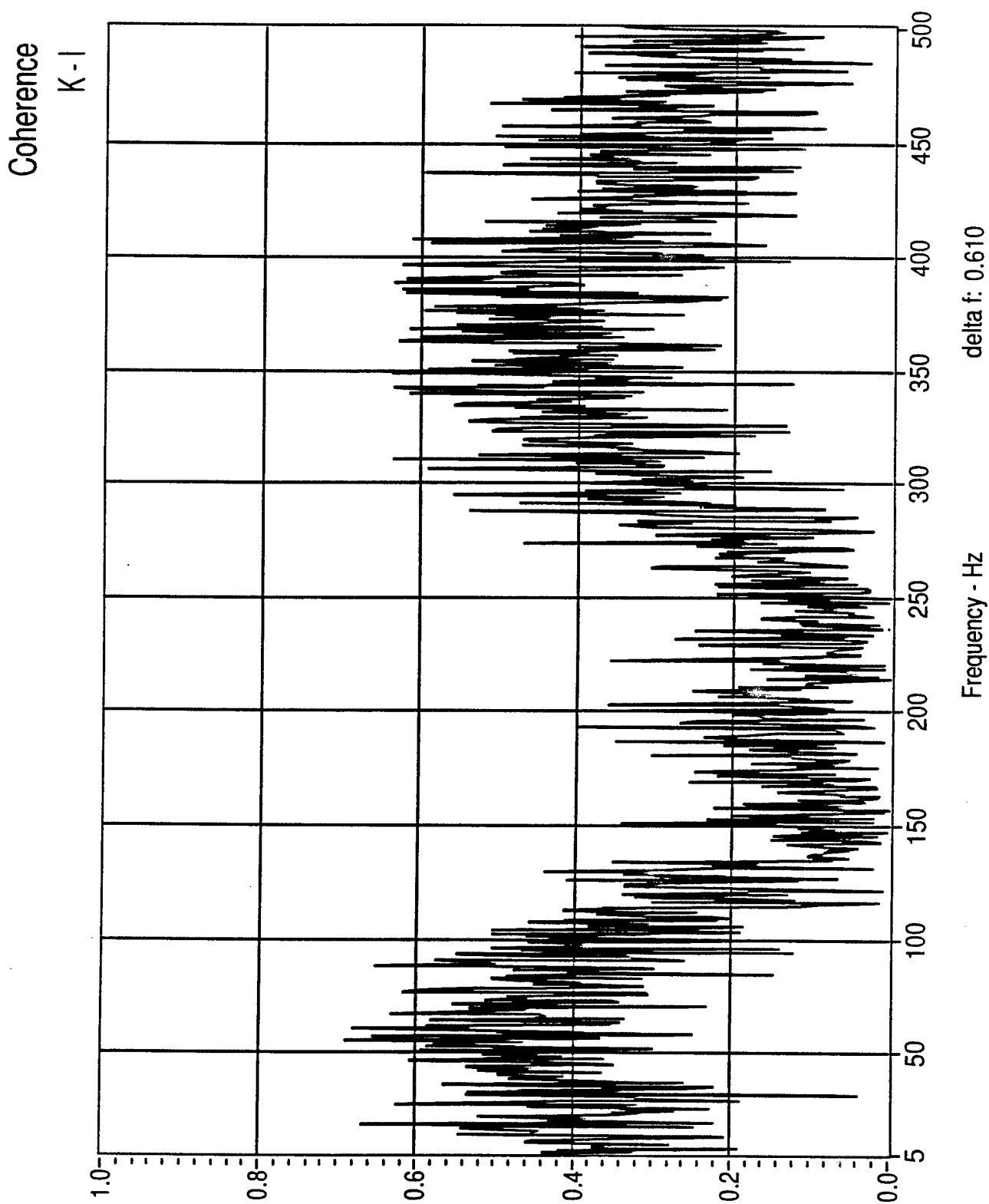
F-15 TPN\_2864: alpha=8 beta=-4 bp=0



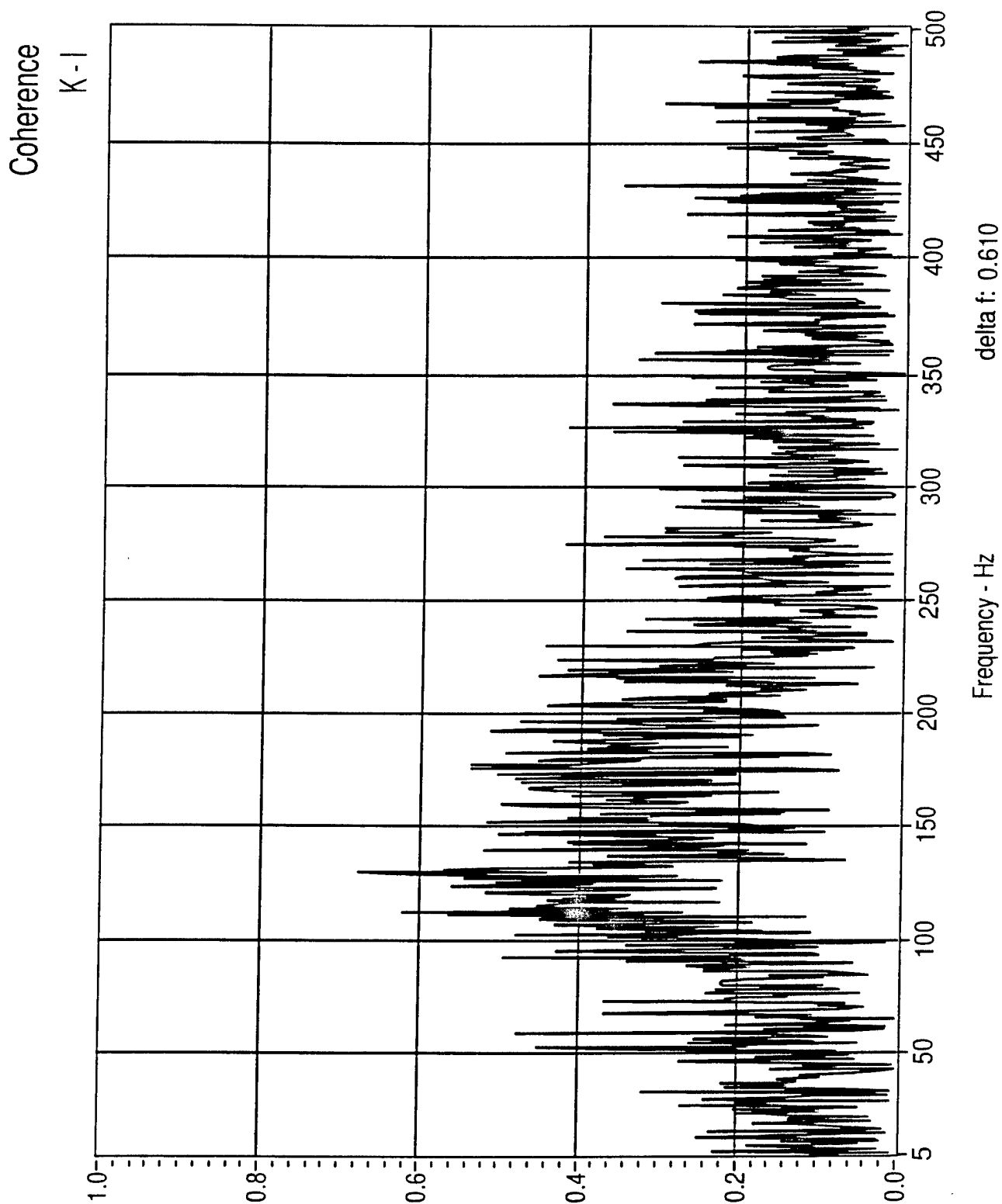
F-15 TPN\_2870:alpha=20 beta=-4 bp=0



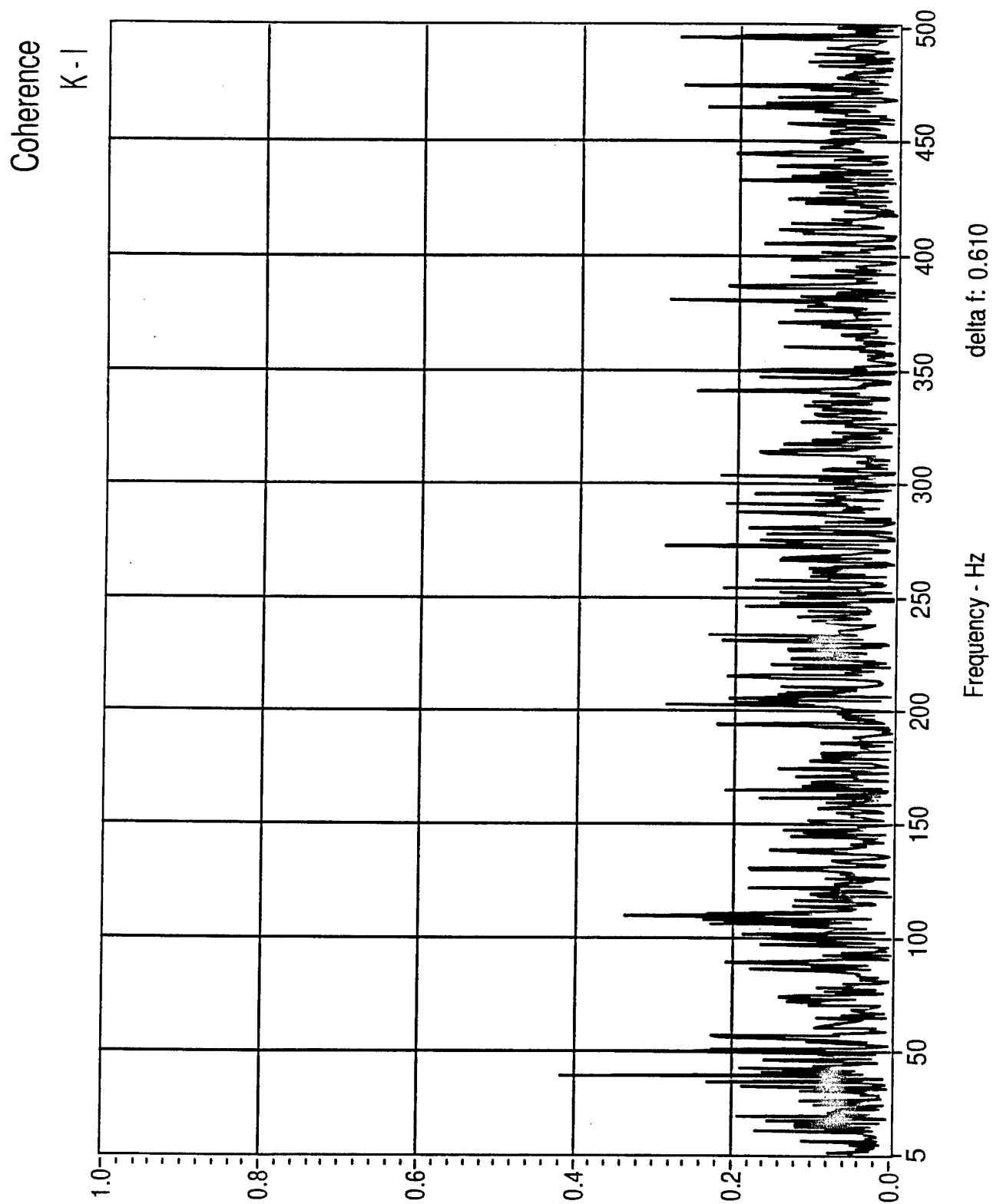
F-15 TPN\_2872: alpha=24 beta=-4 bp=0



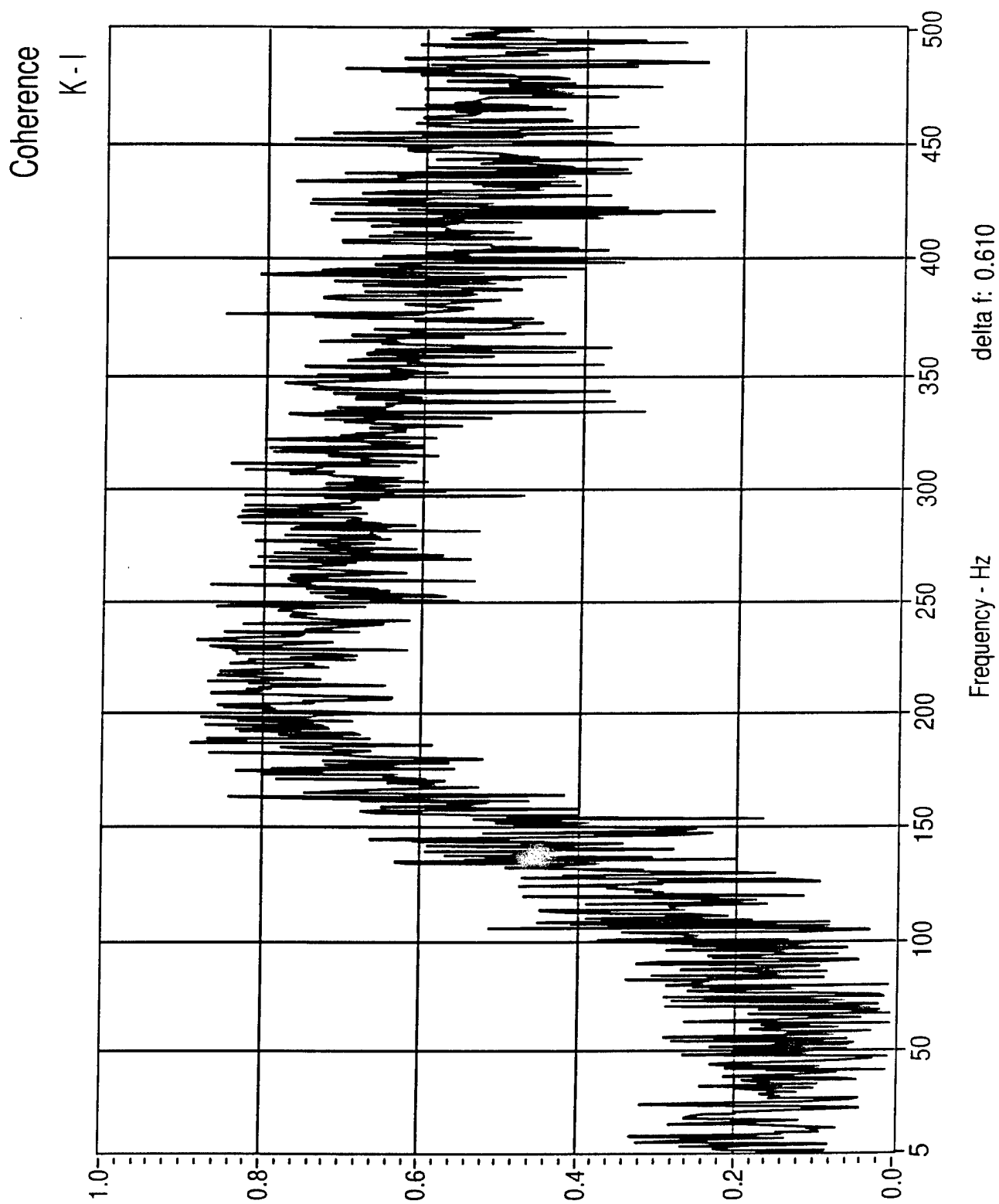
F-15 TPN\_2874: alpha=32 beta=-4 bp=0



F-15 TPN\_3351: alpha=8 beta=4 bp=45

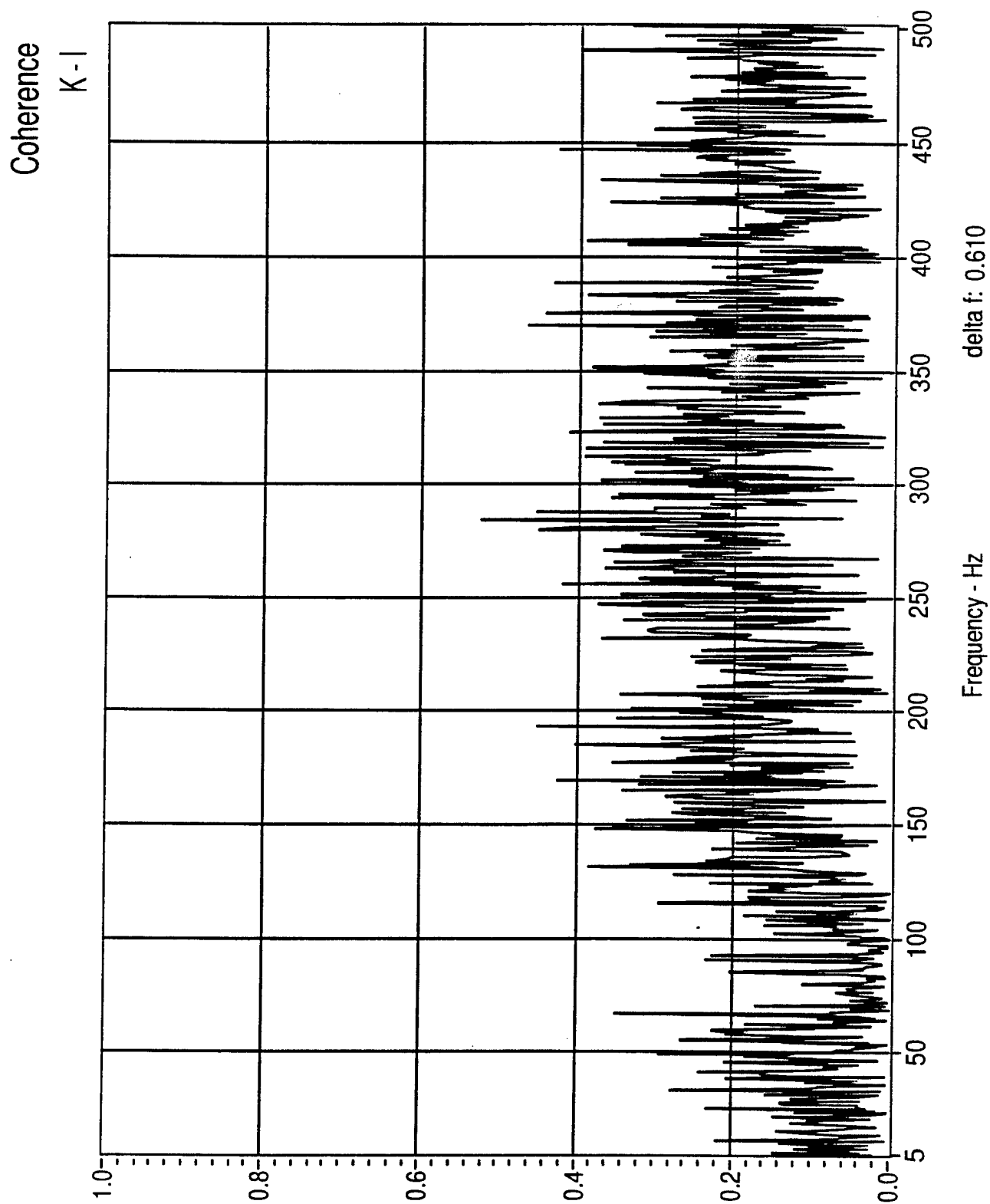


F-15 TPN\_3357: alpha=20 beta=4 bp=45

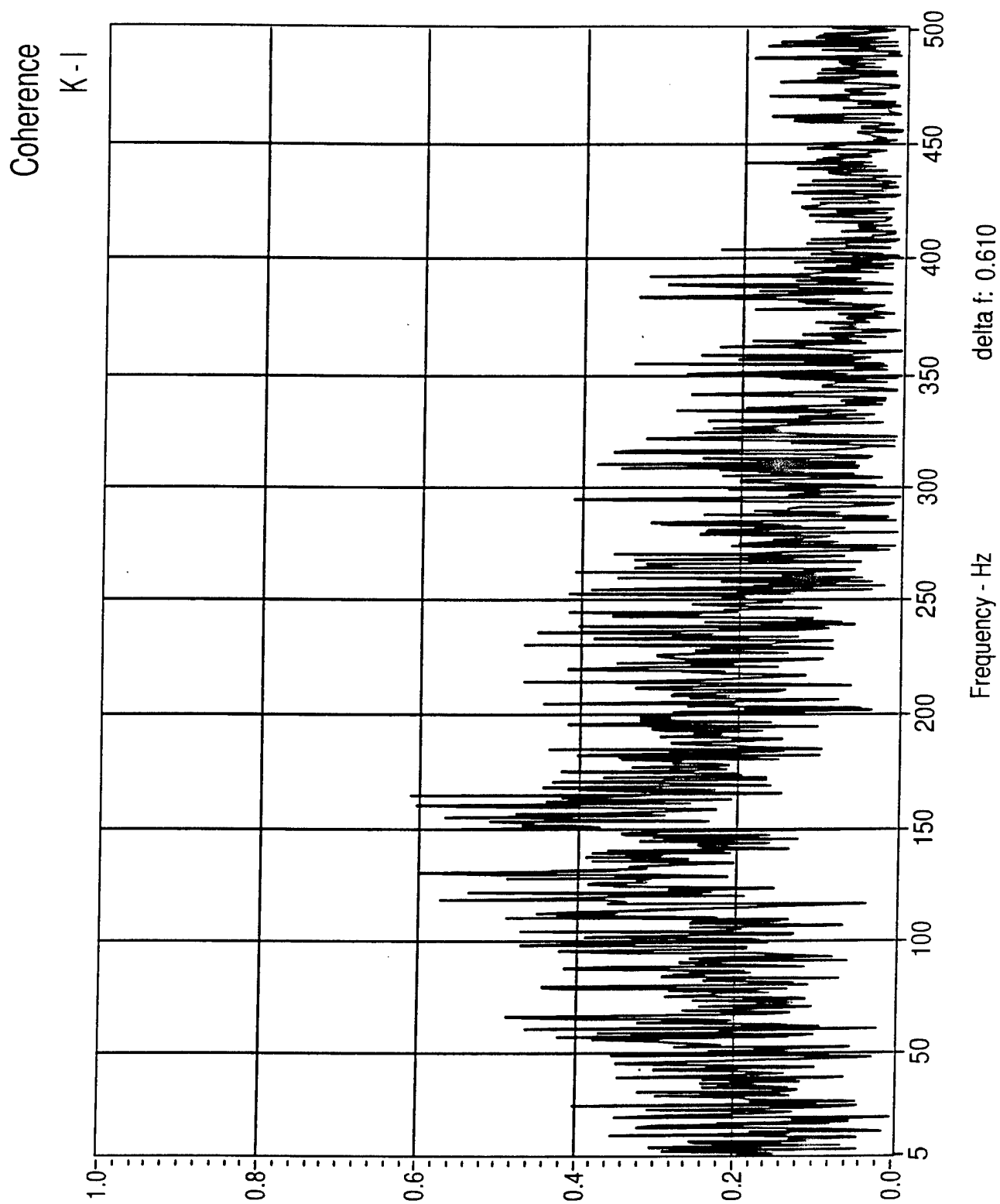




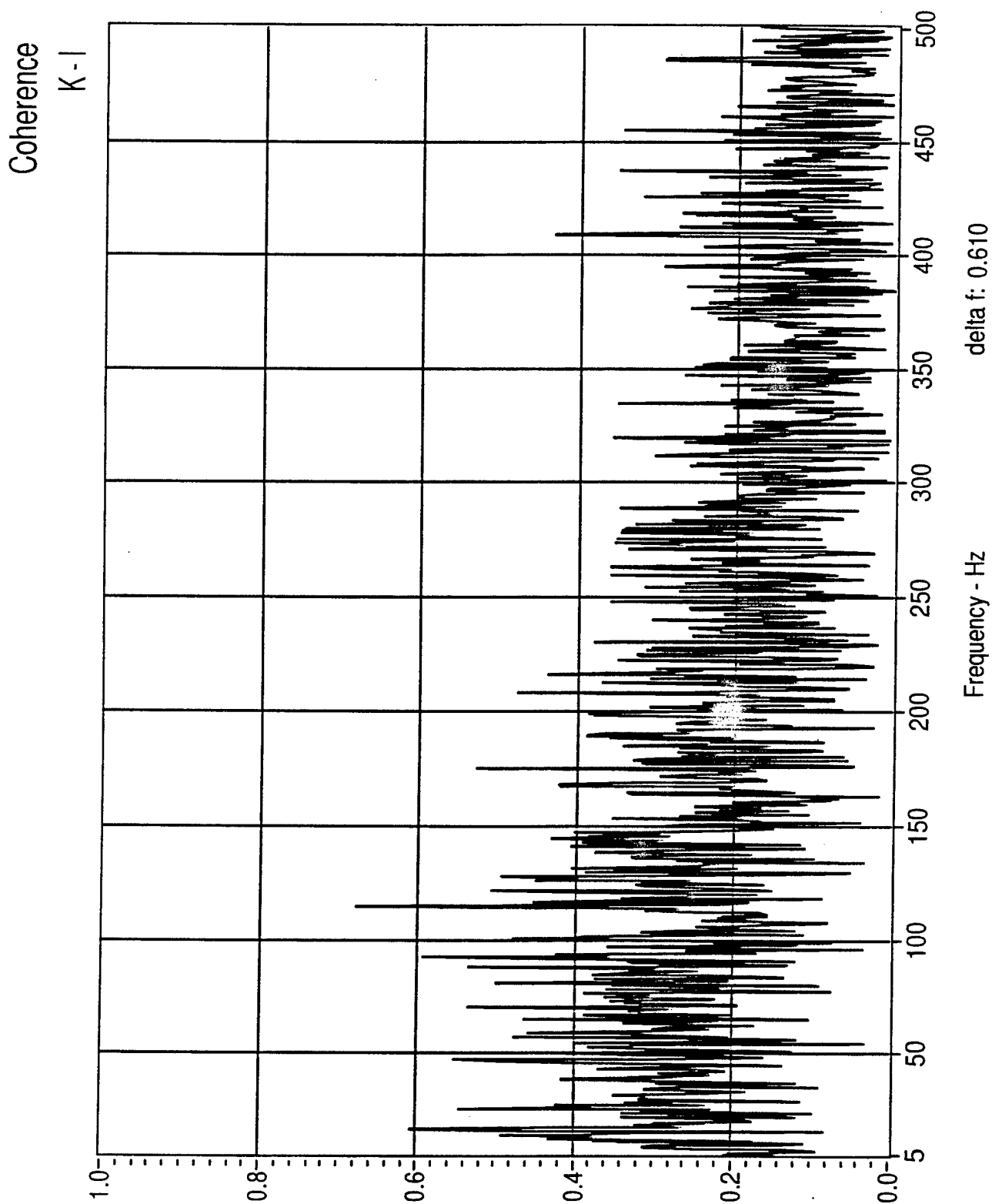
F-15 TPN\_3359: alpha=24 beta=4 bp=45



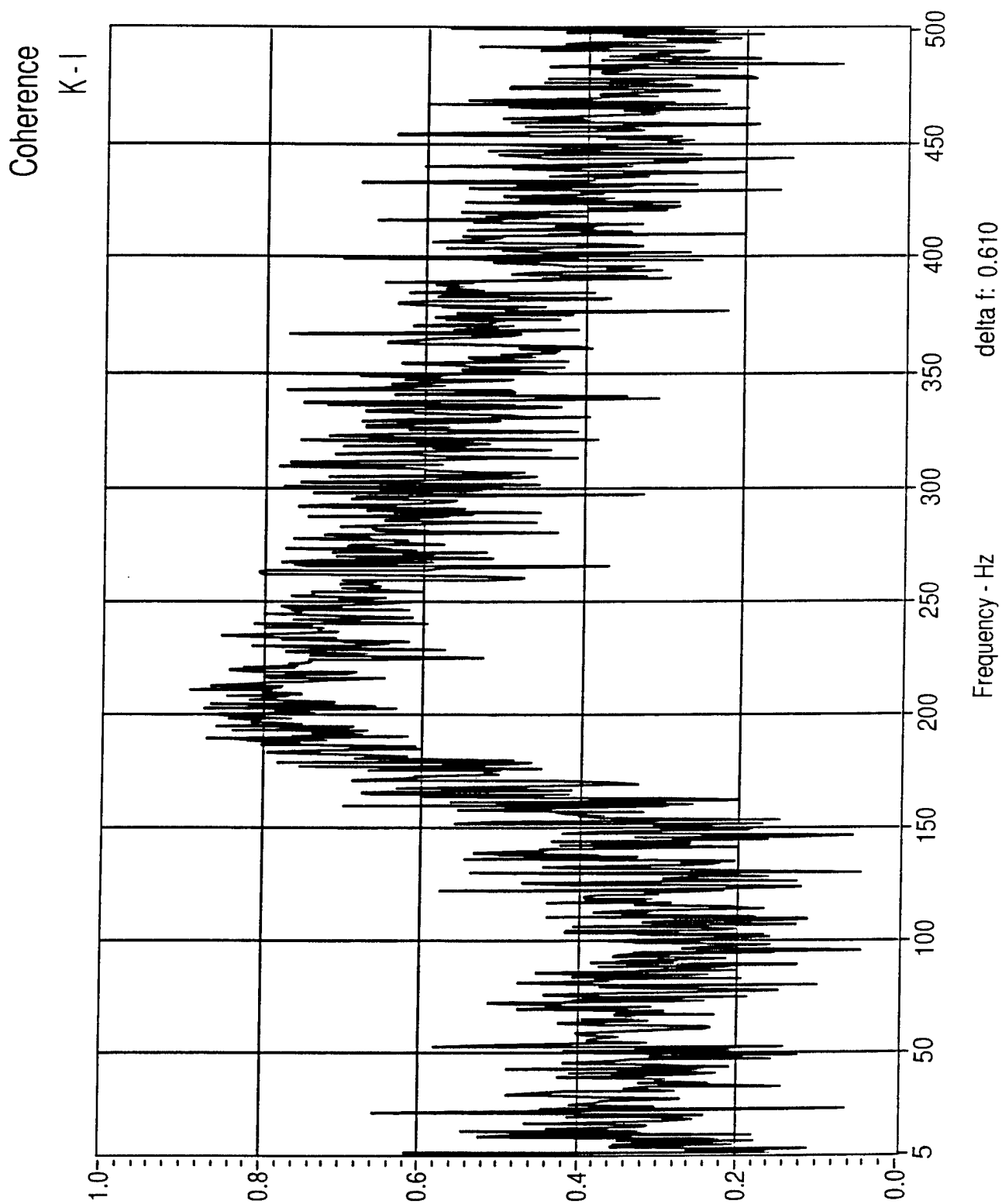
F-15 TPN\_3361: alpha=32 beta=4 bp=45



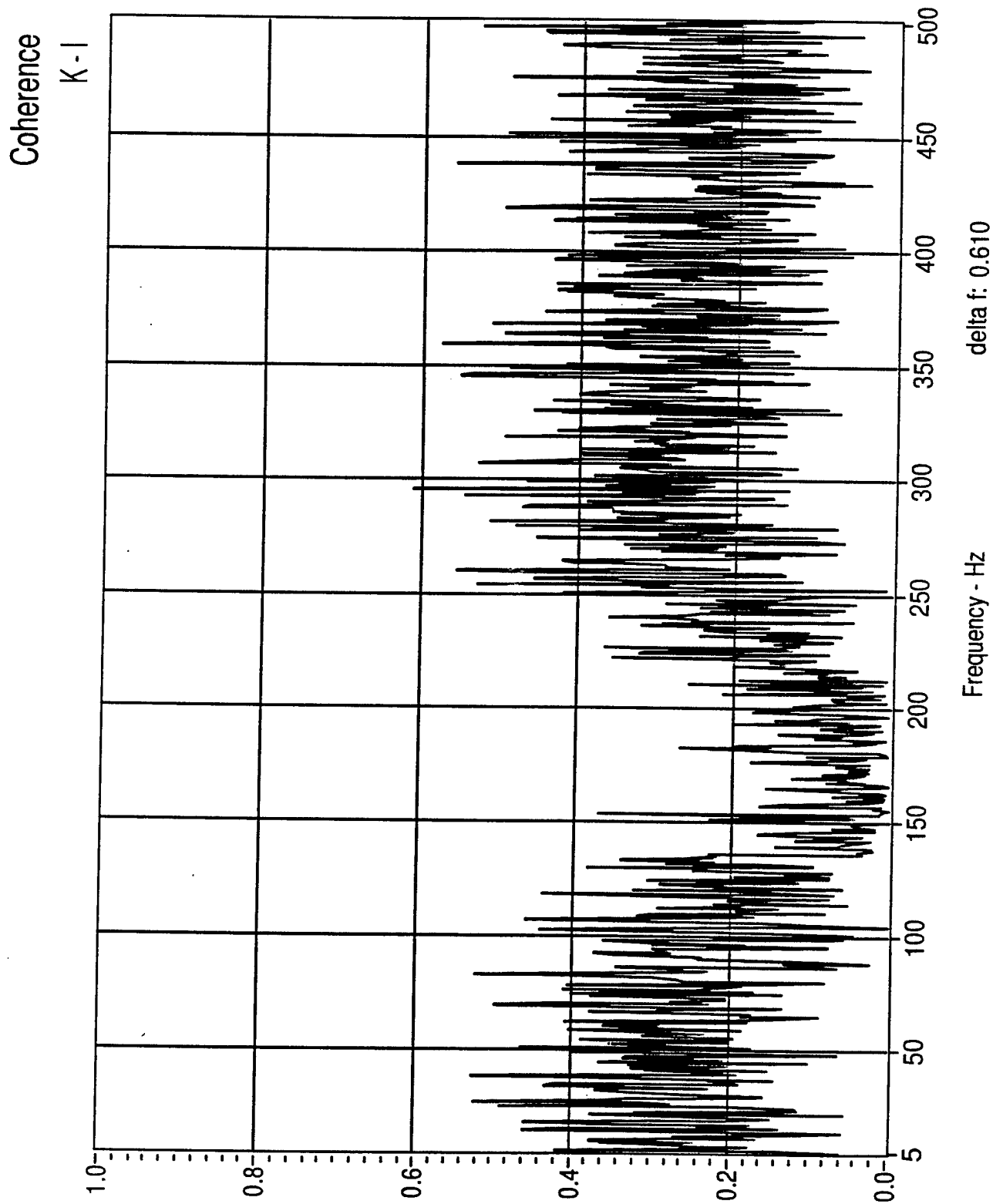
F-15 TPN\_3333: alpha=8 beta=0 bp=45



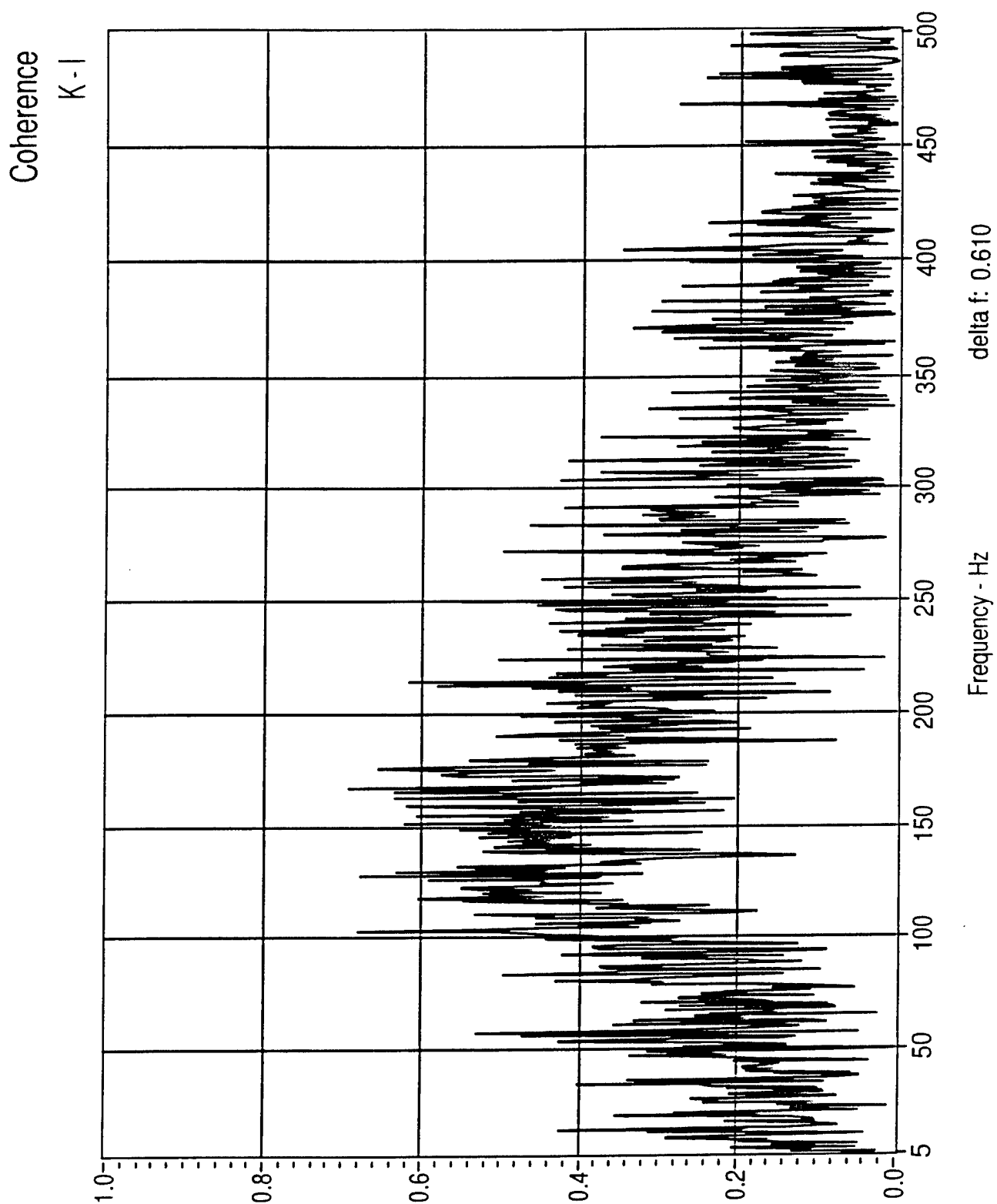
F-15 TPN\_3339: alpha=20 beta=0 bp=45



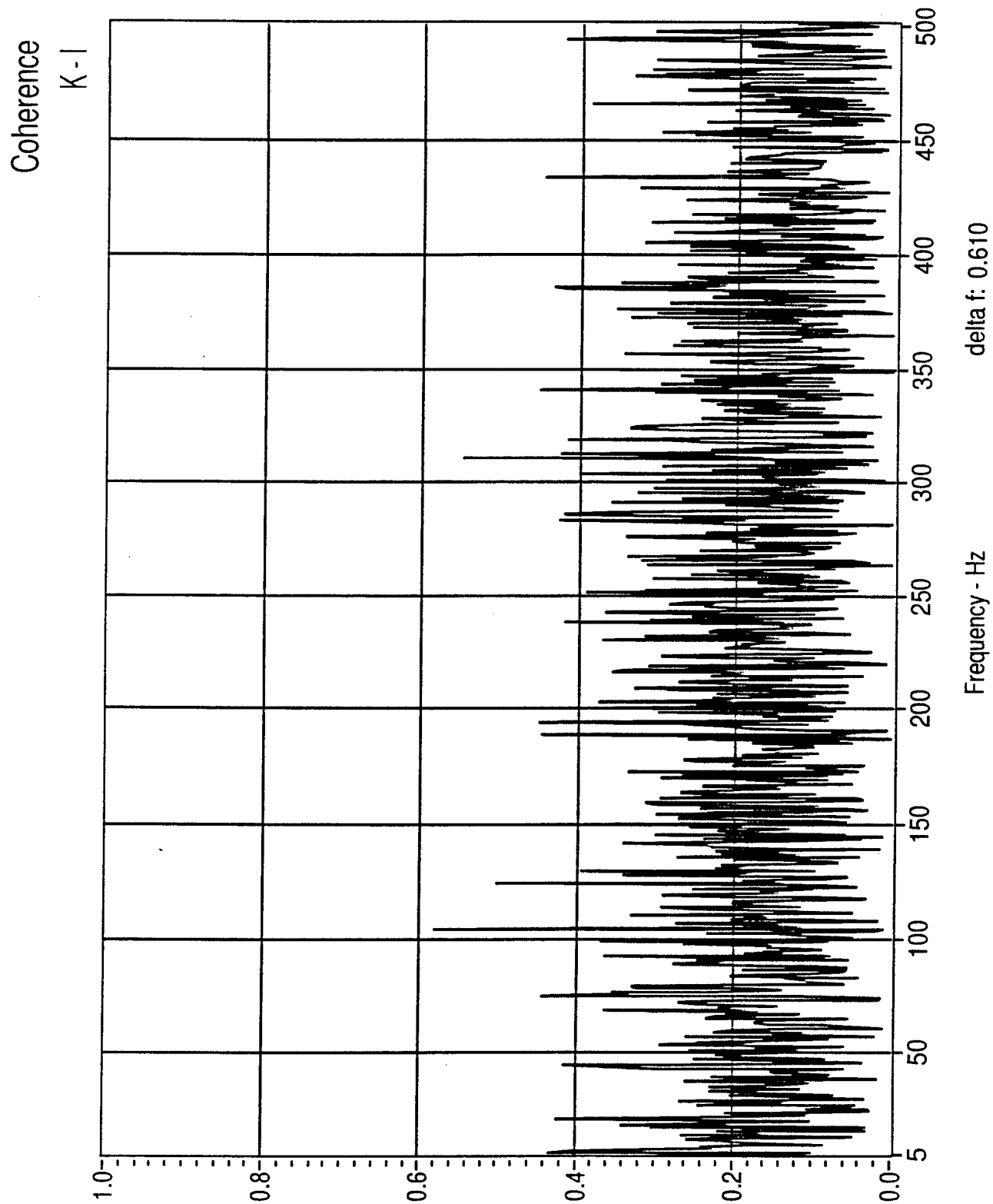
F-15 TPN\_3341: alpha=24 beta=0 bp=45



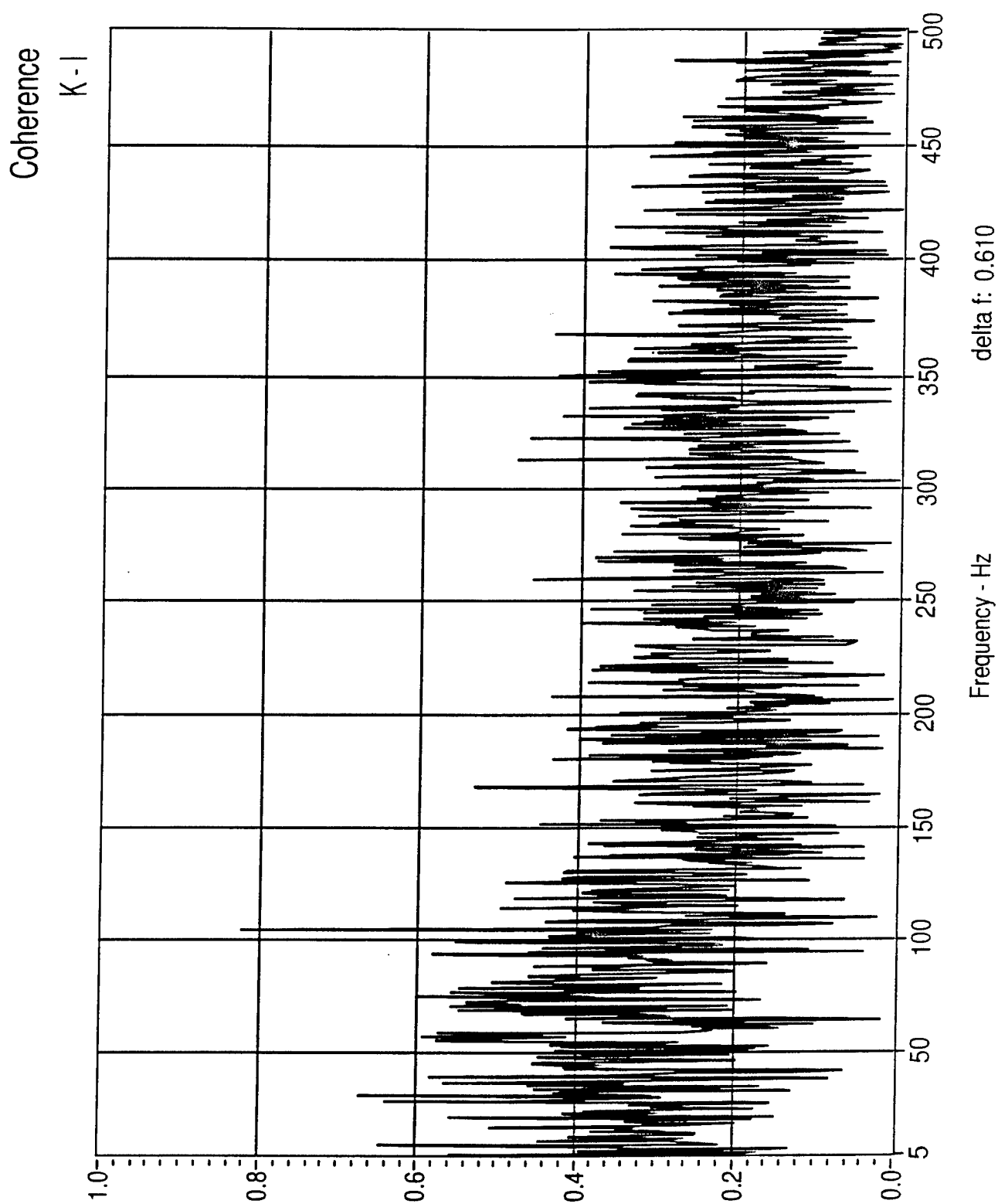
F-15 TPN\_3343: alpha=32 beta=0 bp=45



F-15 TPN\_3369:alpha=8 beta=-4 bp=45

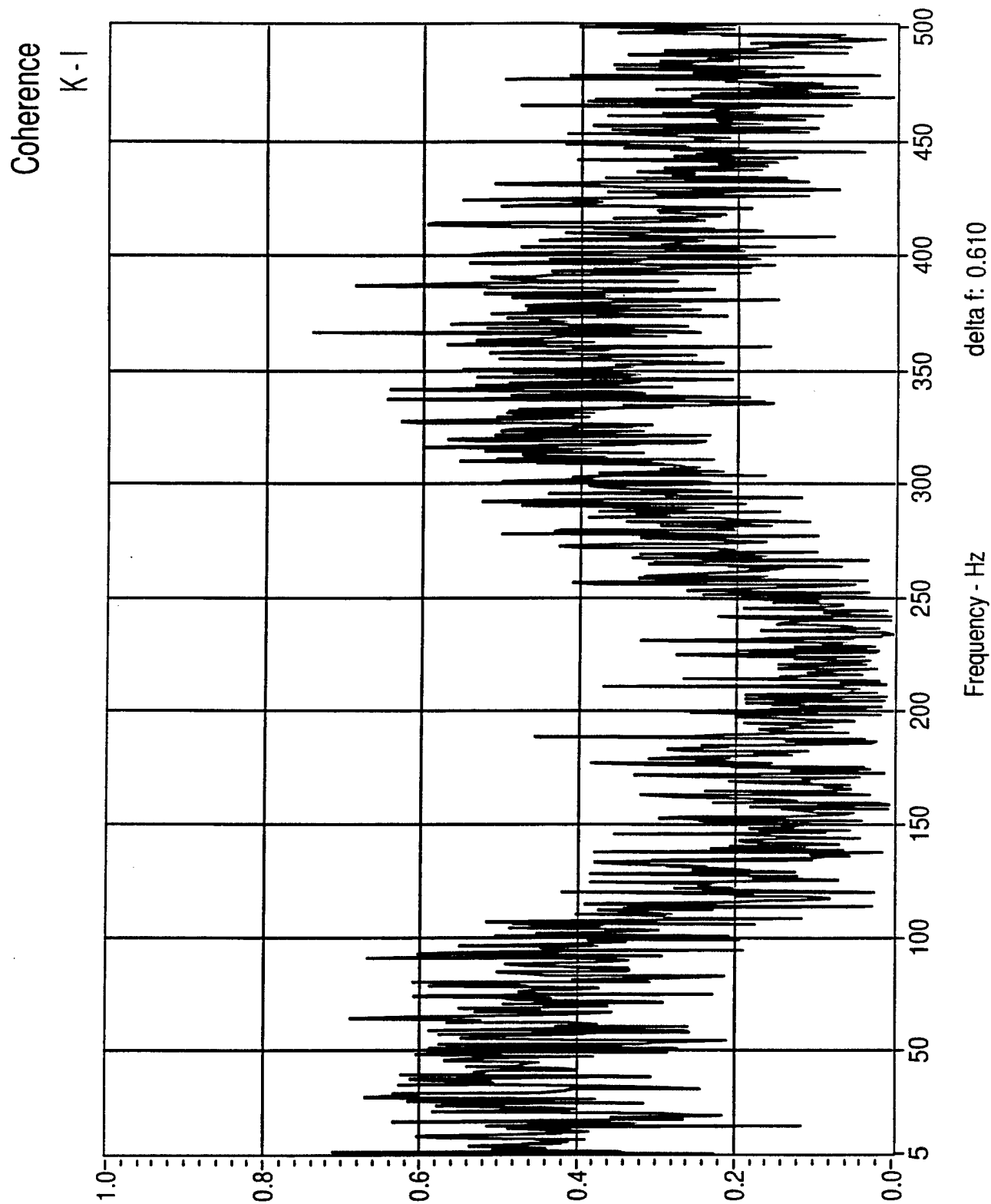


F-15 TPN\_3375: alpha=20 beta=-4 bp=45

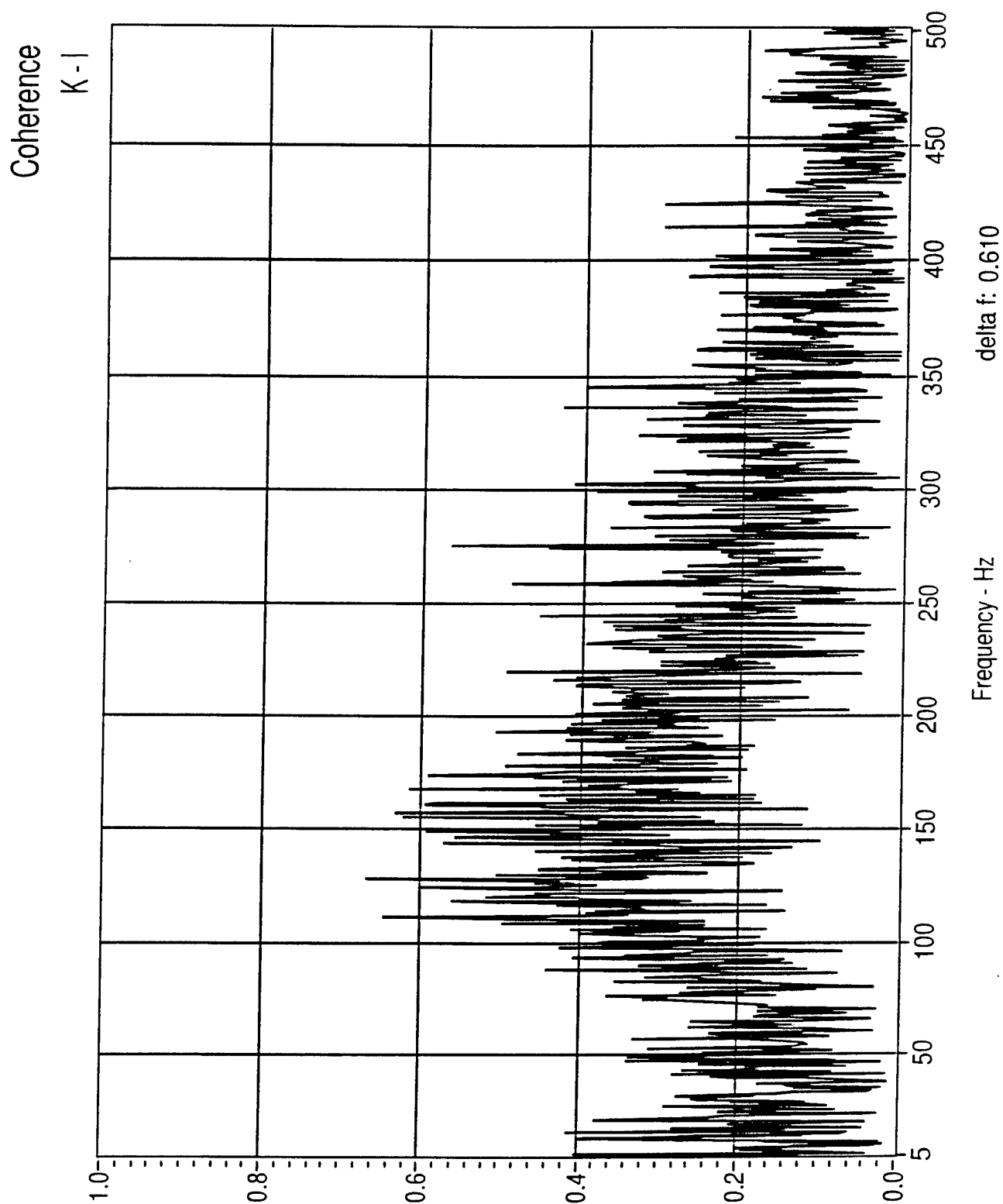




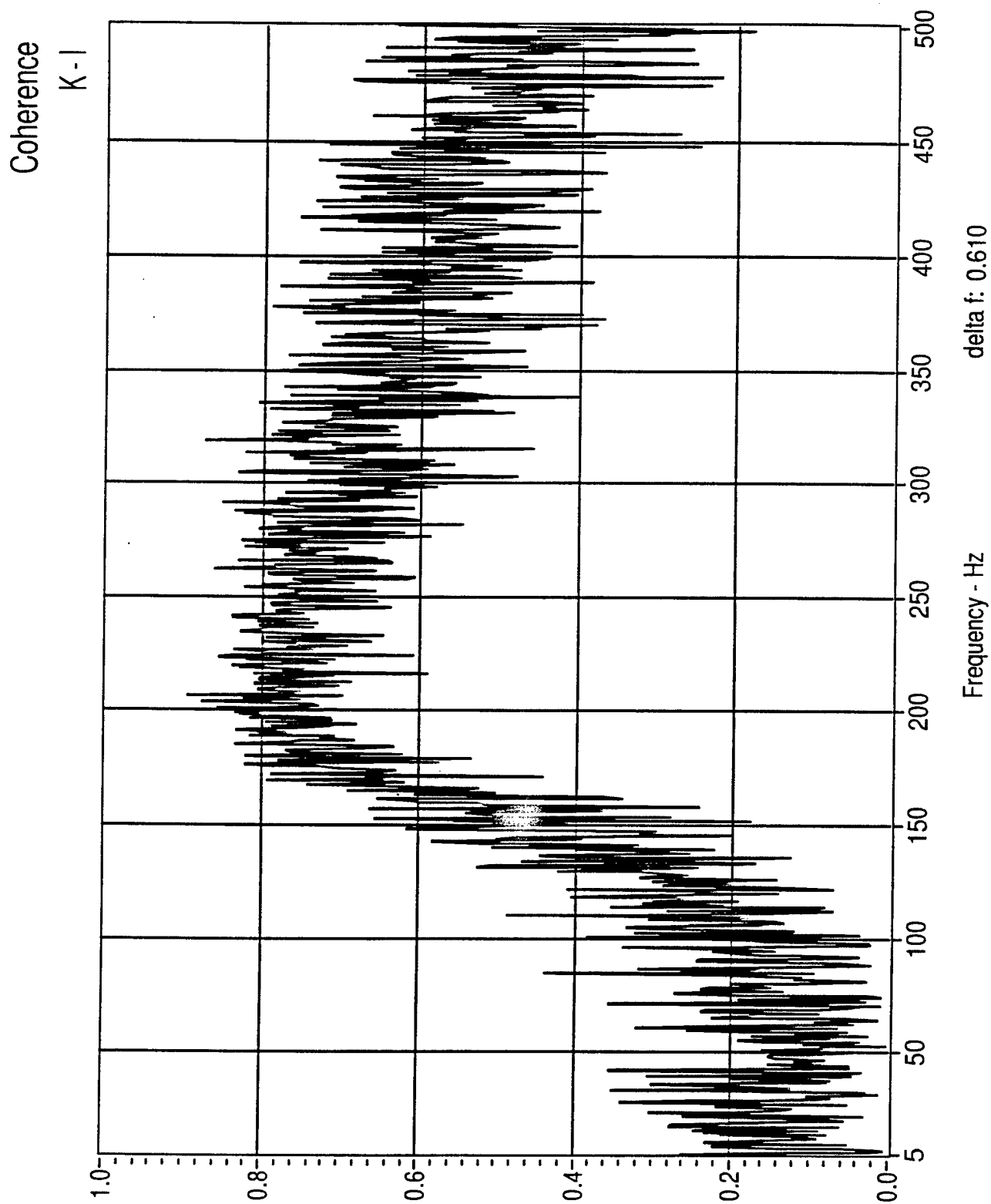
F-15 TPN\_3377: alpha=24 beta=-4 bp=45



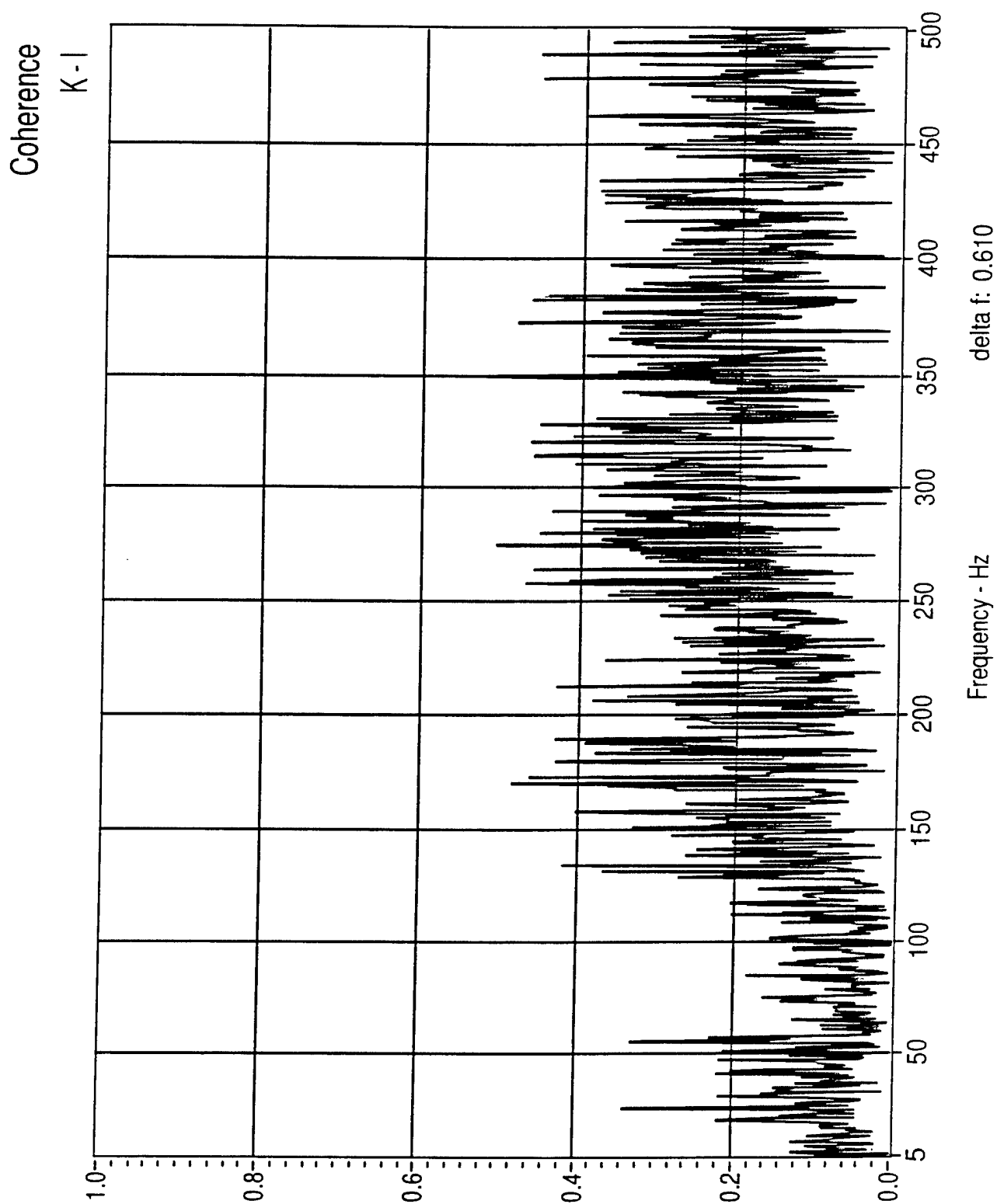
F-15 TPN\_3379: alpha=32 beta=-4 bp=45



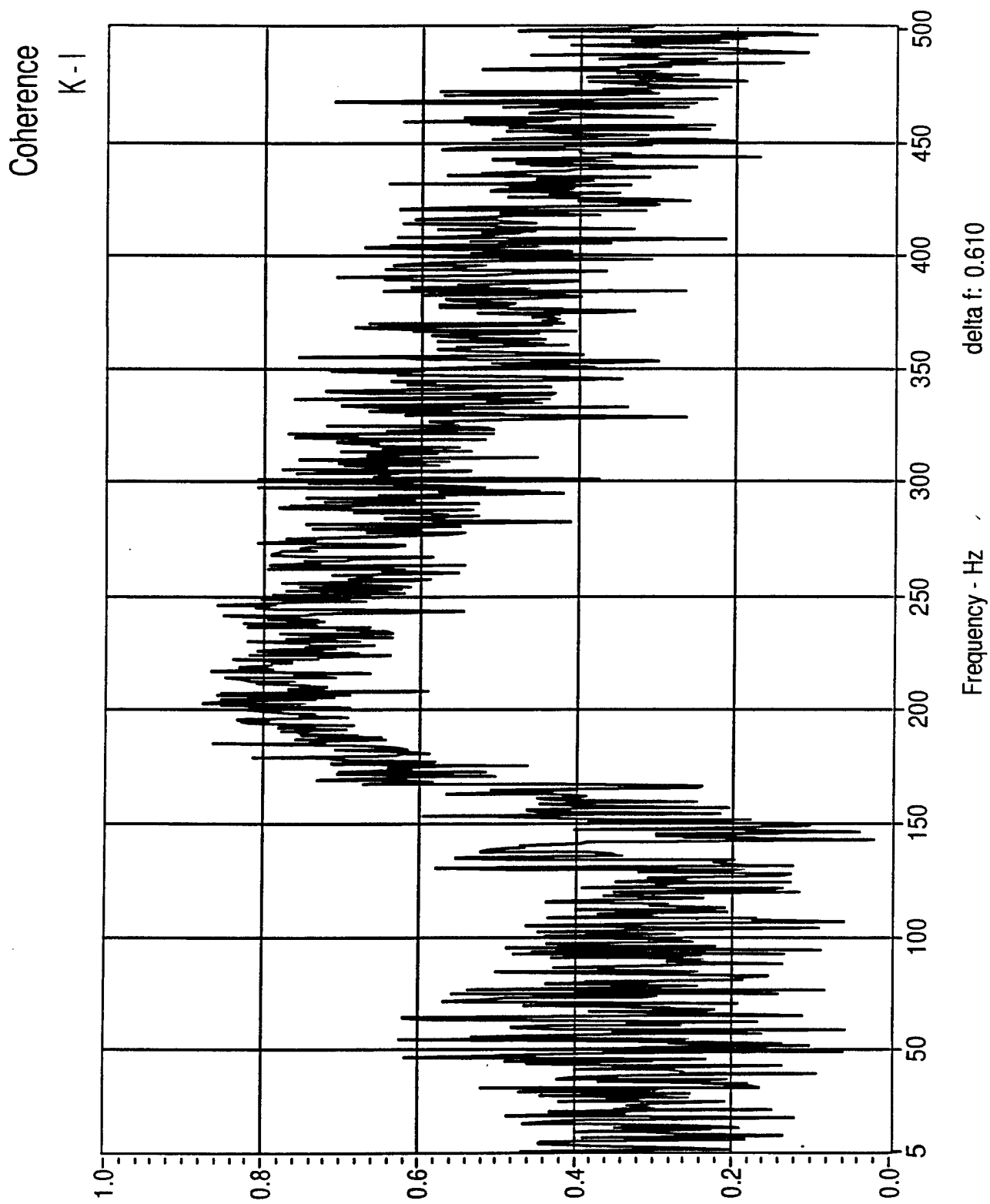
F-15 TPN\_3046:alpha=20 beta=4 bp=65



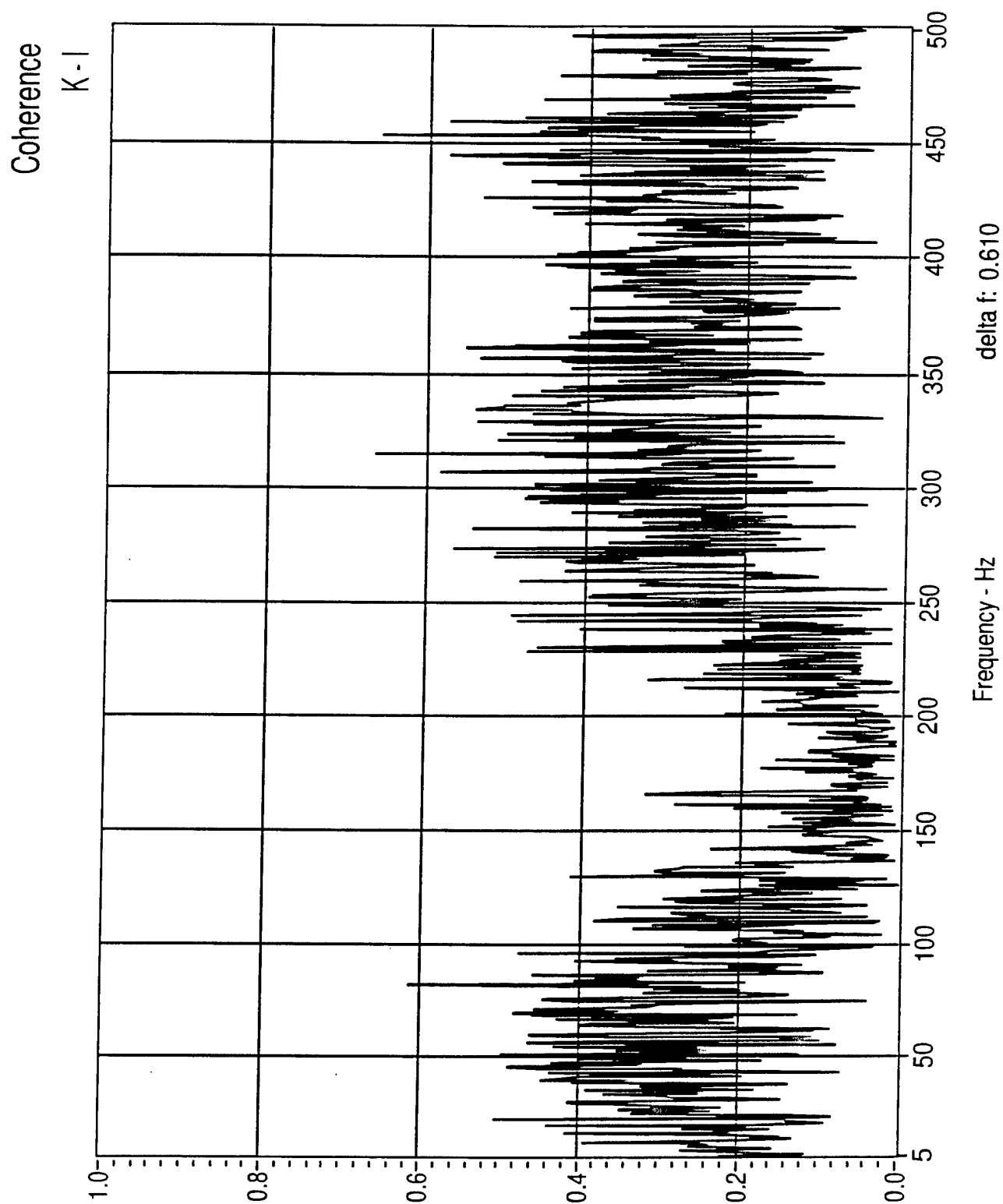
F-15 TPN\_3048: alpha=24 beta=4 bp=65



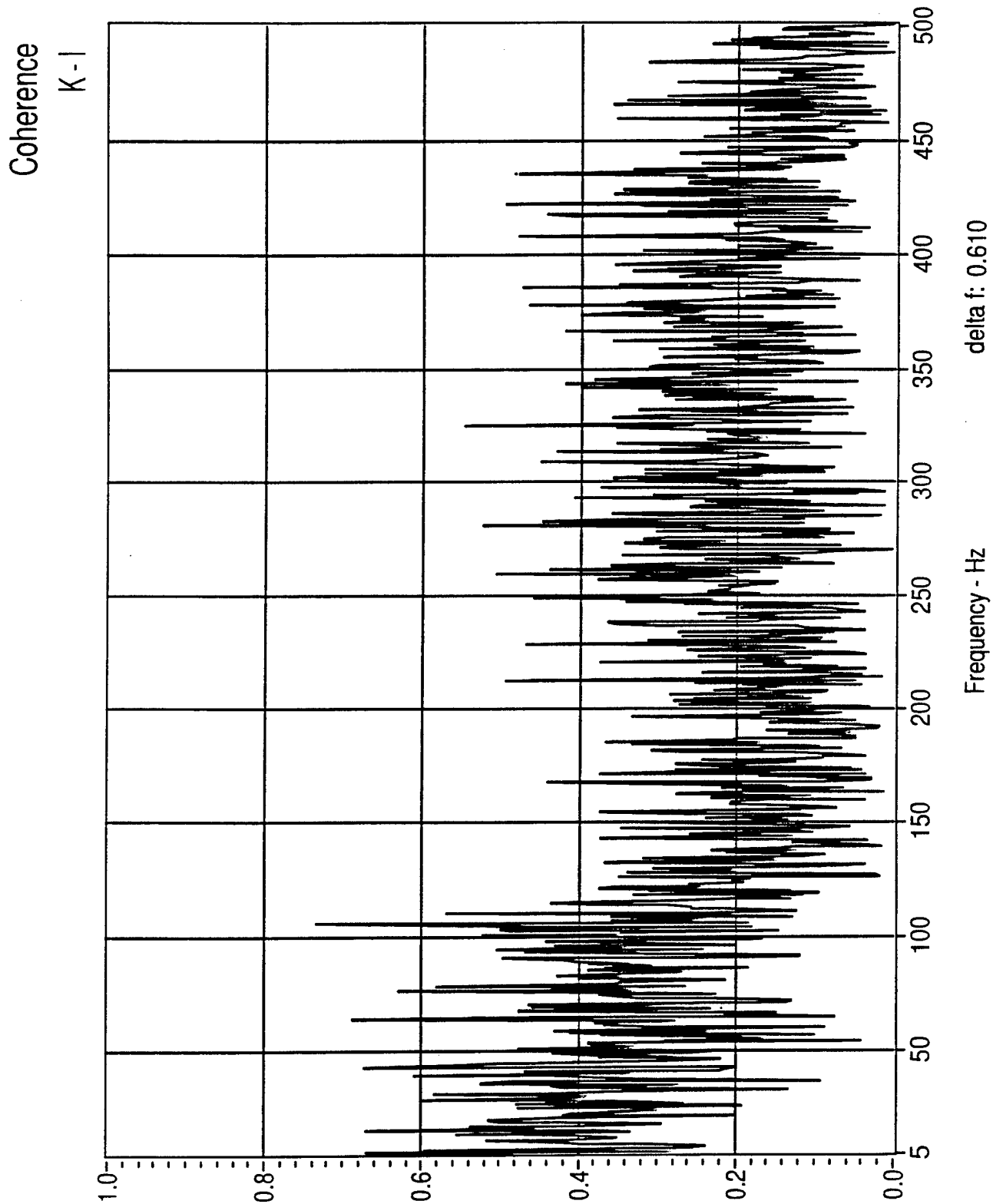
F-15 TPN\_3040: alpha=20 beta=0 bp=65



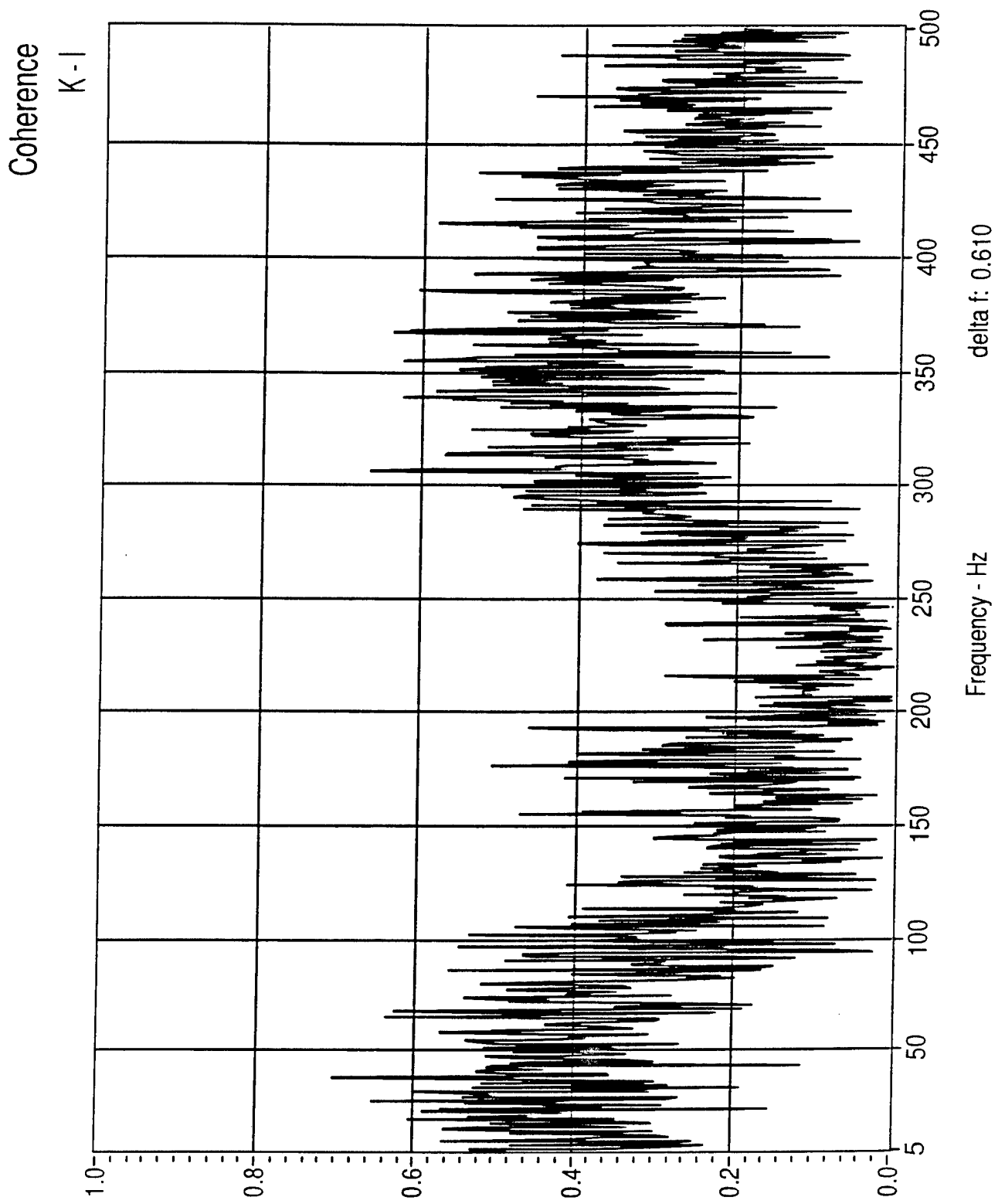
F-15 TPN\_3042:  $\alpha=24$   $\beta=0$  bp=65



F-15 TPN\_3034: alpha=20 beta=-4 bp=6

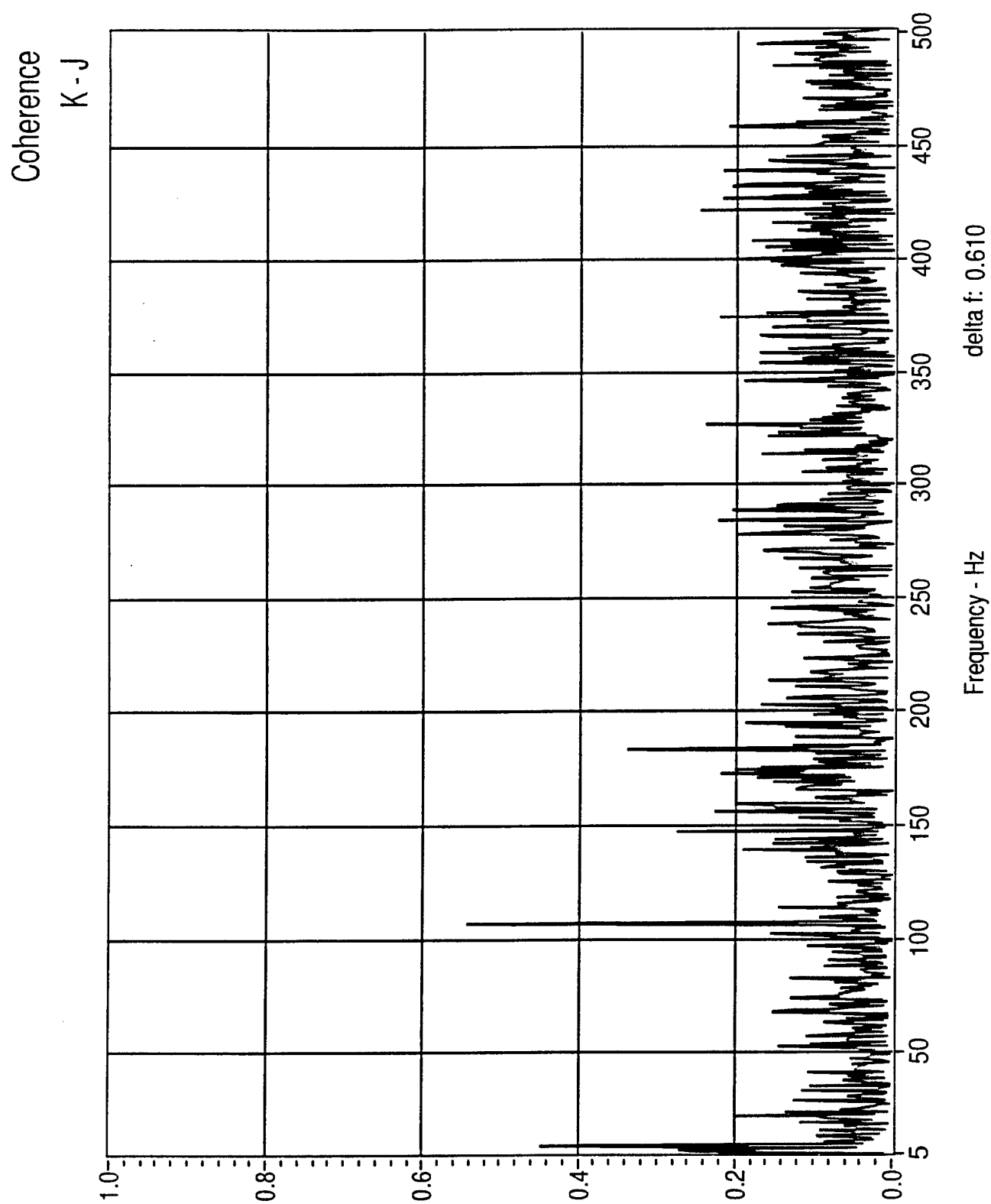


F-15 TPN\_3036: alpha=24 beta=-4 bp=65

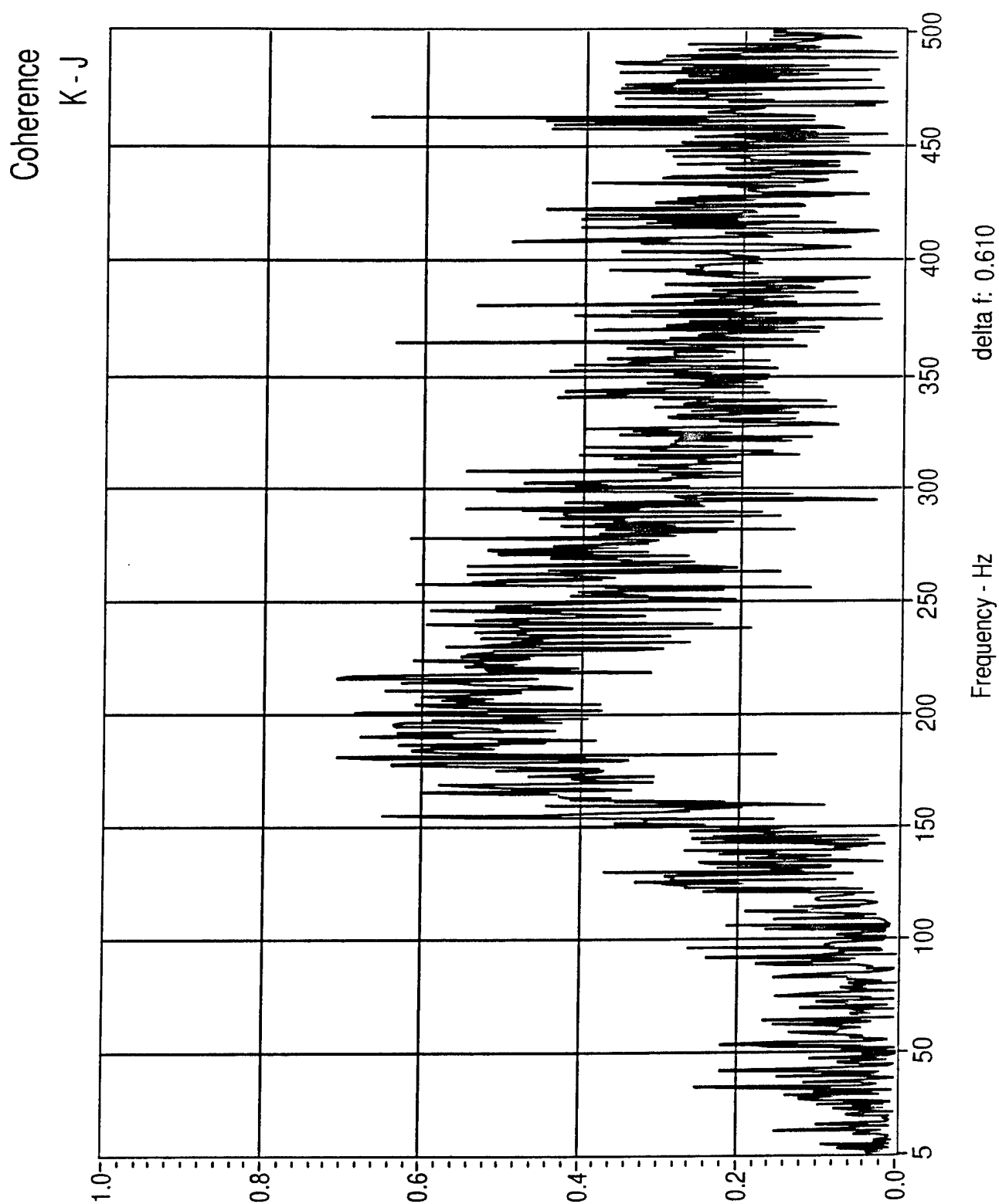




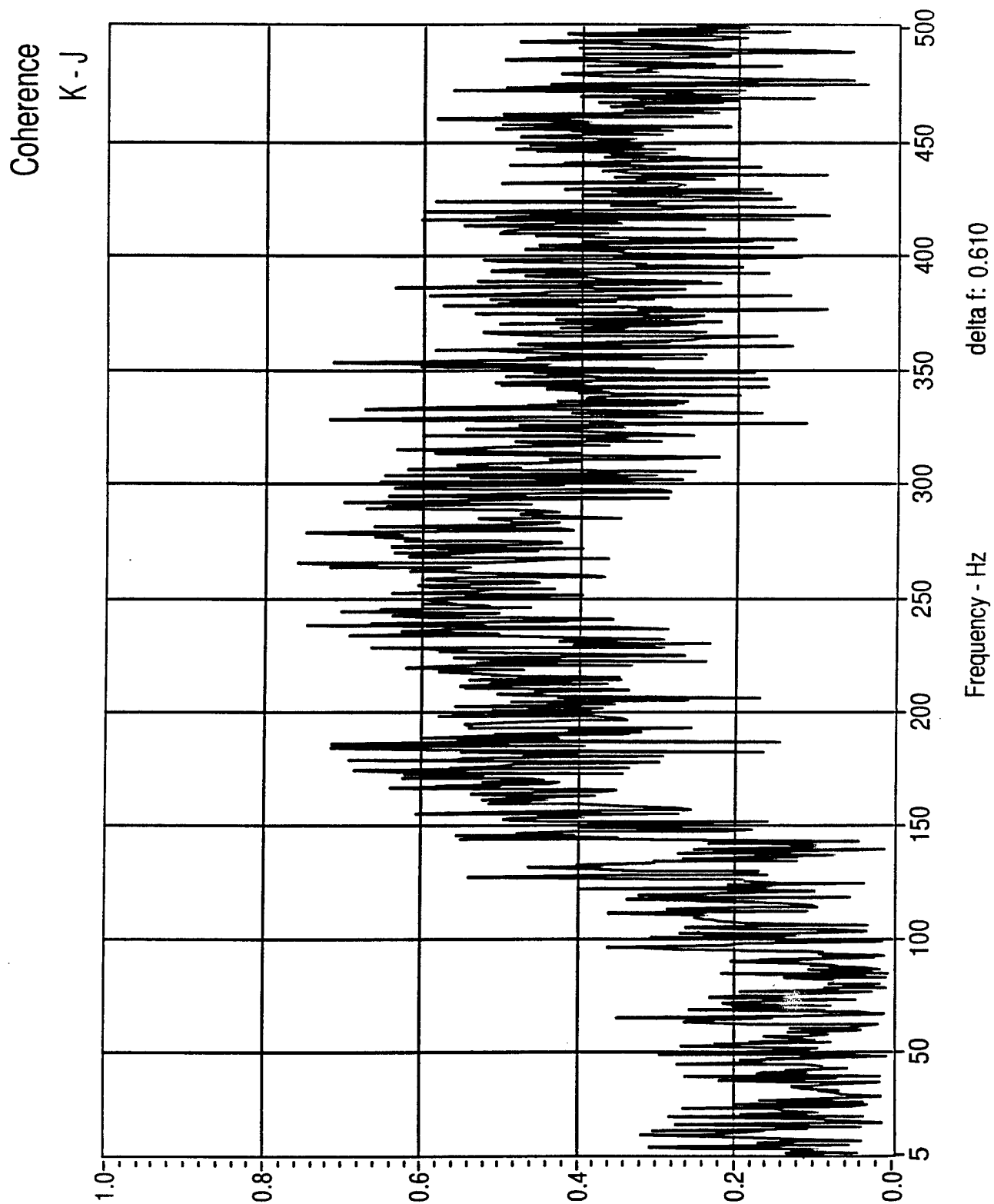
F-15 TPN\_2918: alpha=8 beta=4 bp=0



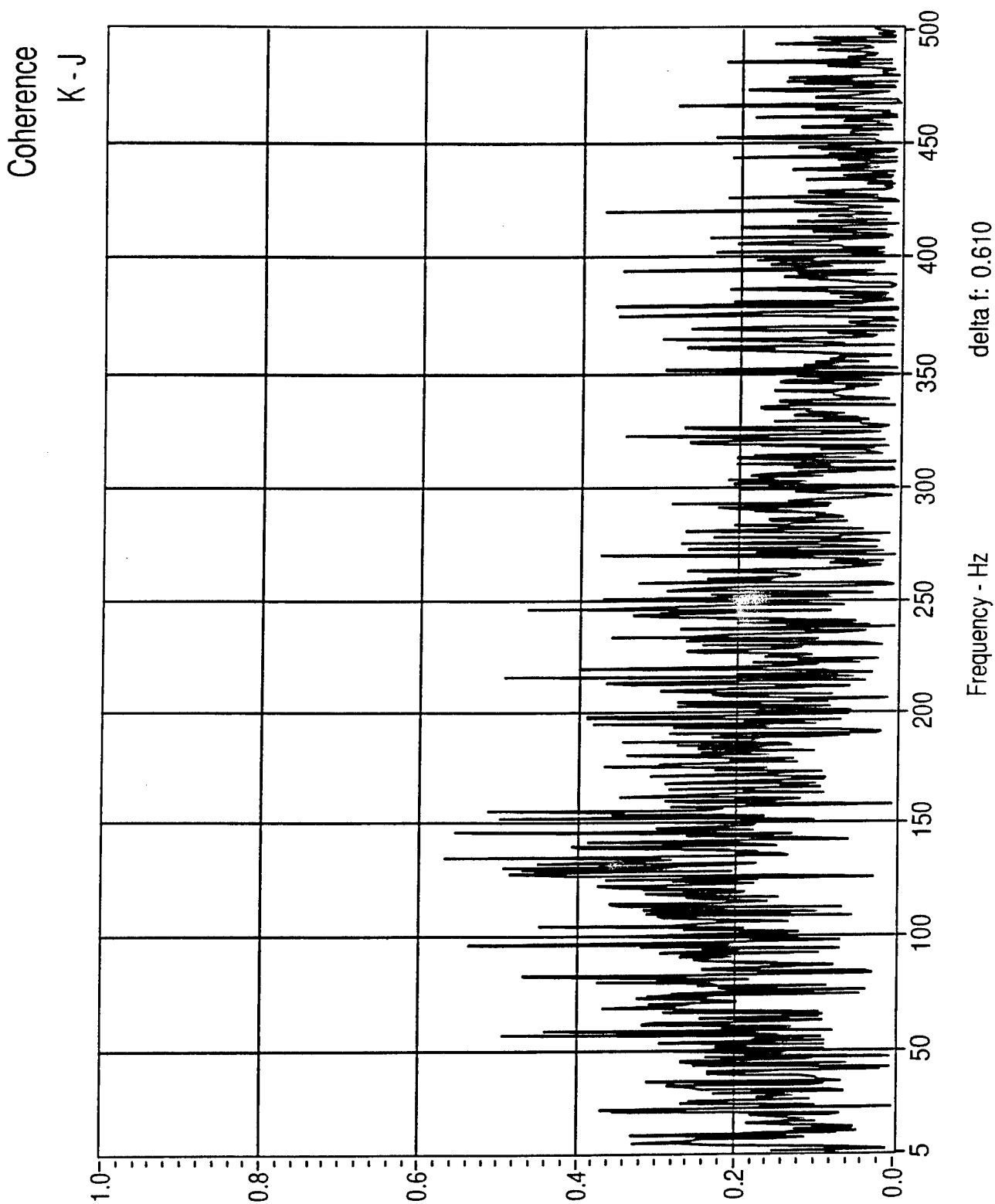
F-15 TPN\_2924:  $\alpha=20$   $\beta=4$   $\text{bp}=0$



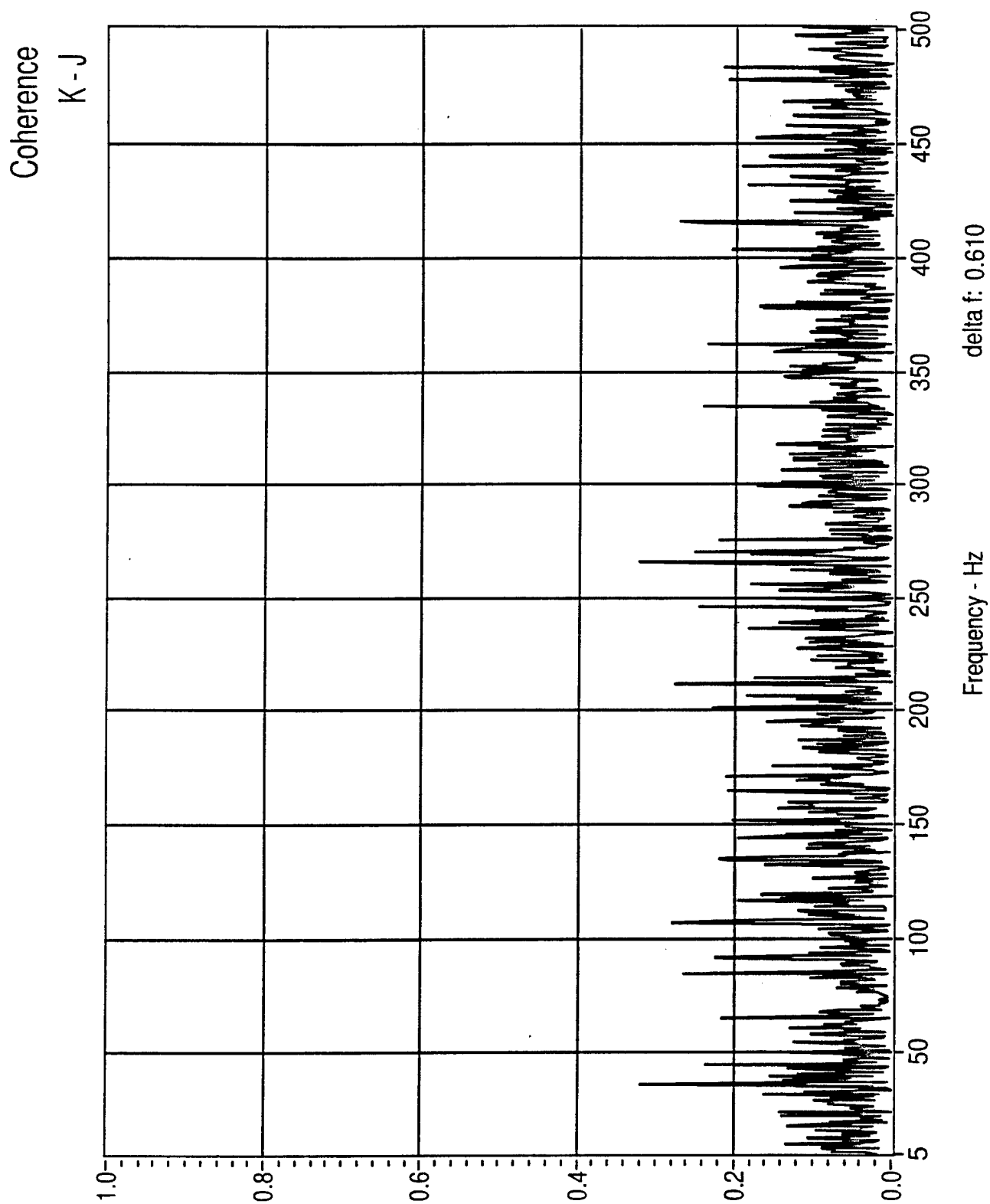
F-15 TPN\_2926: alpha=24 beta=4 bp=0



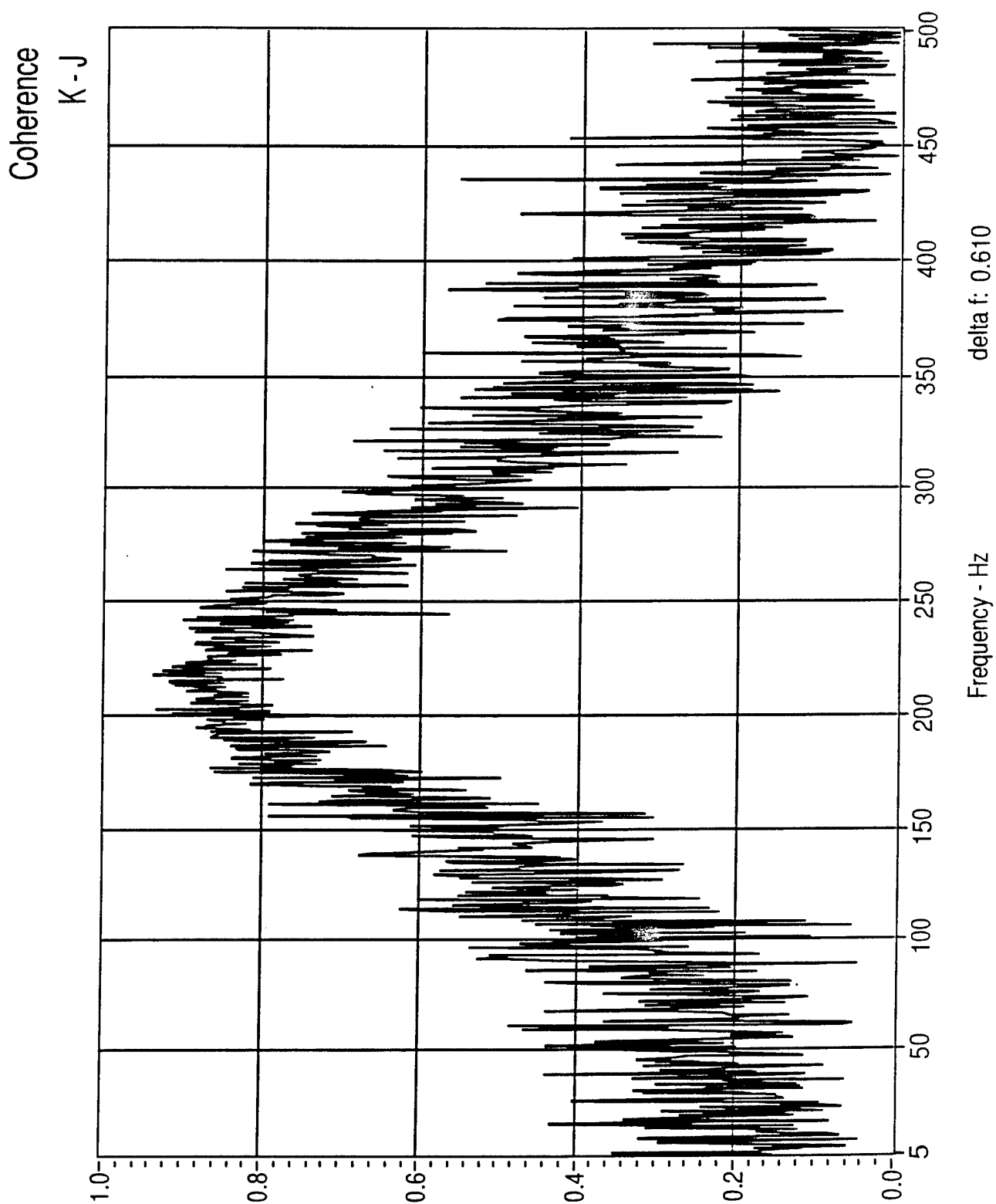
F-15 TPN\_2928: alpha=32 beta=4 bp=0



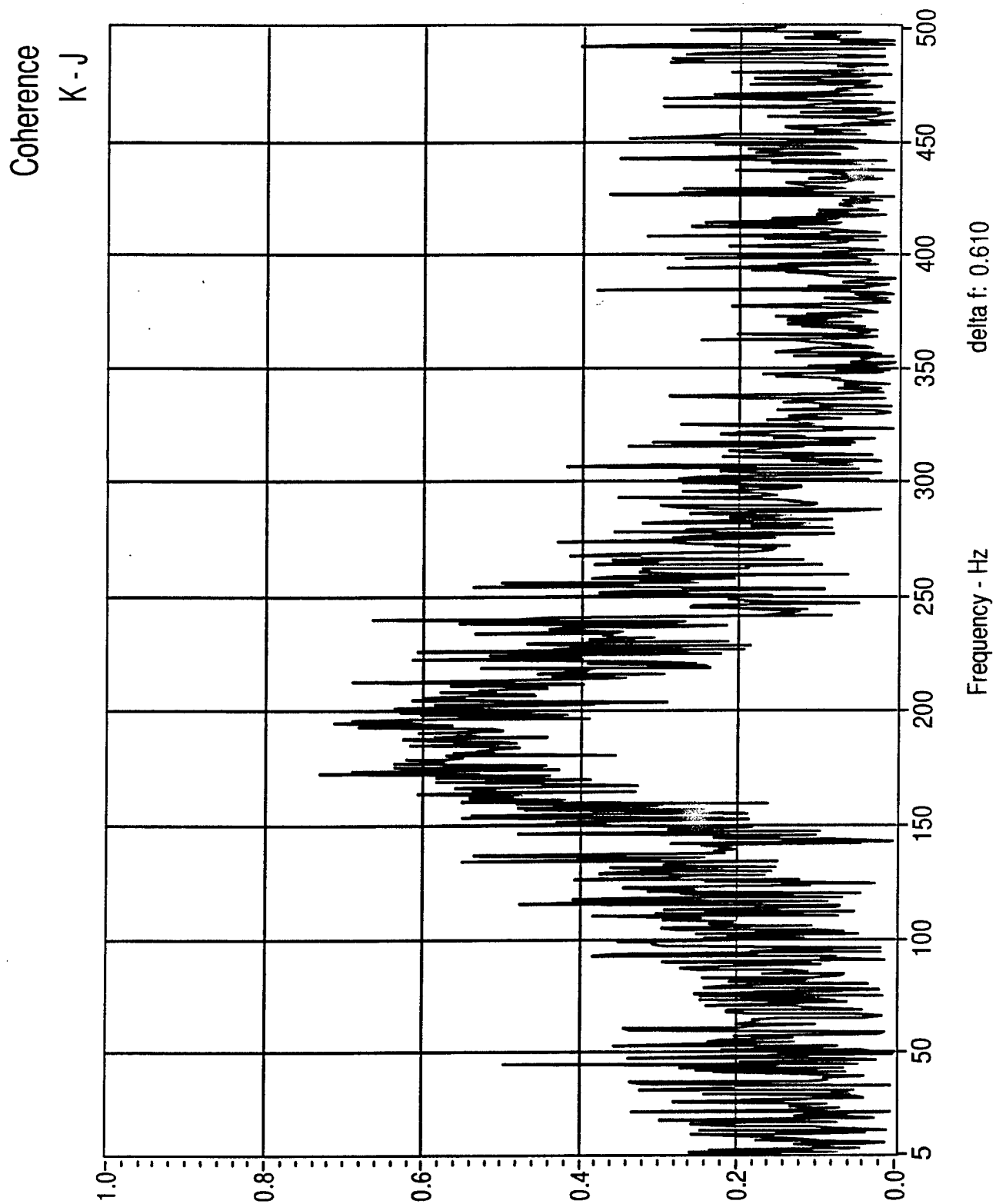
F-15 TPN\_2844:alpha=8 beta=0 bp=0



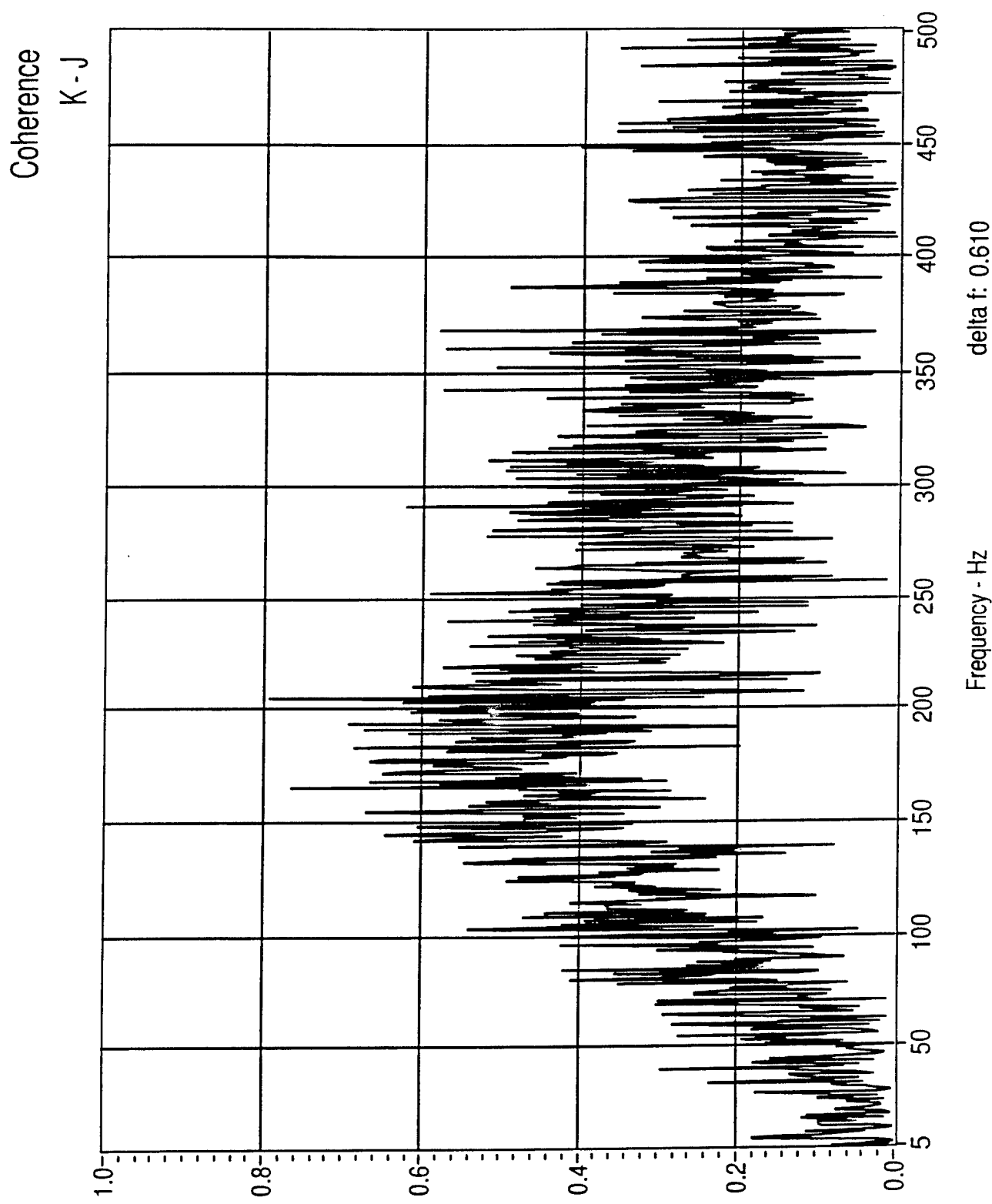
F-15 TPN\_2850: alpha=20 beta=0 bp=0



F-15 TPN\_2852: alpha=24 beta=0 bp=0

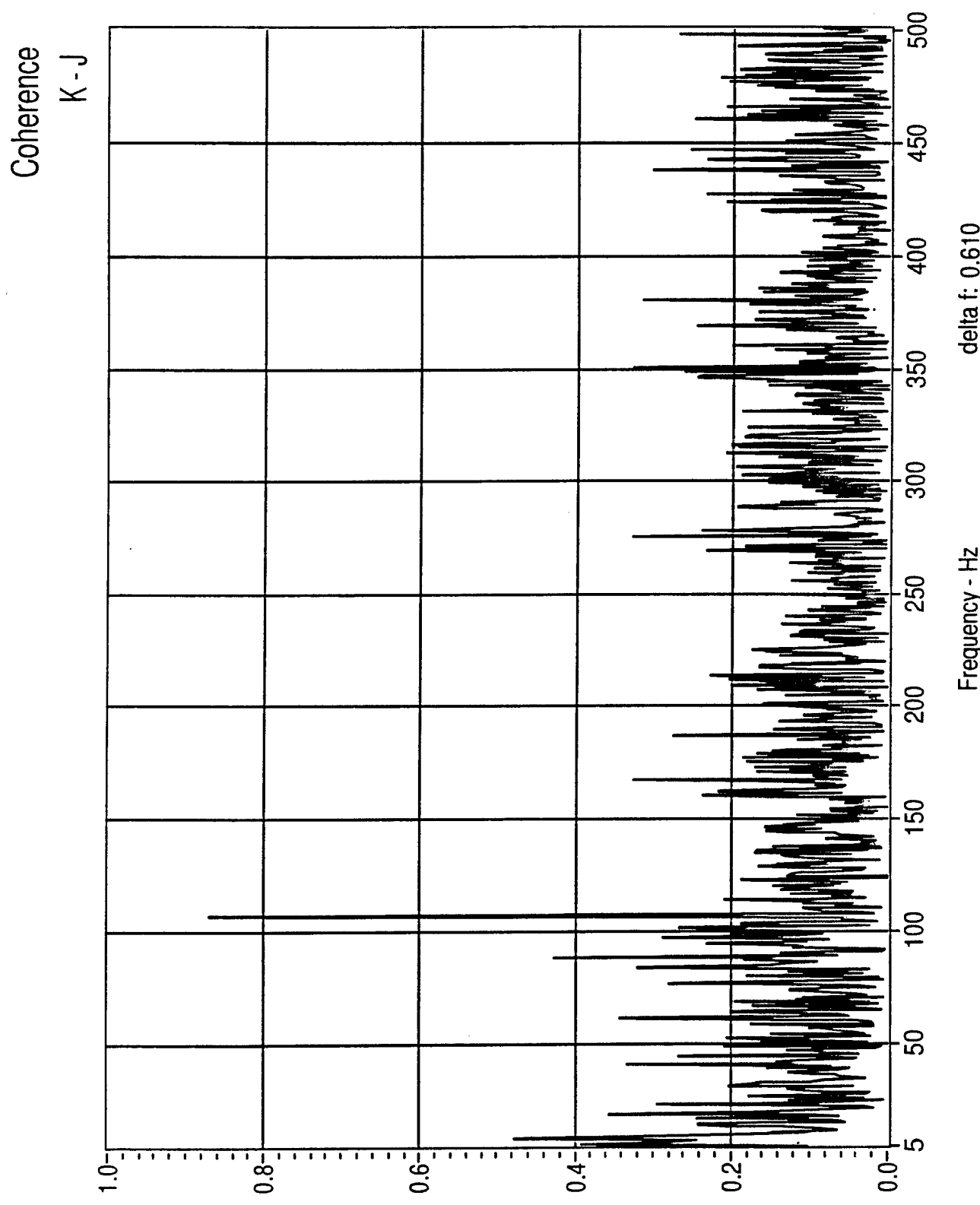


F-15 TPN\_2854: alpha=32 beta=0 bp=0

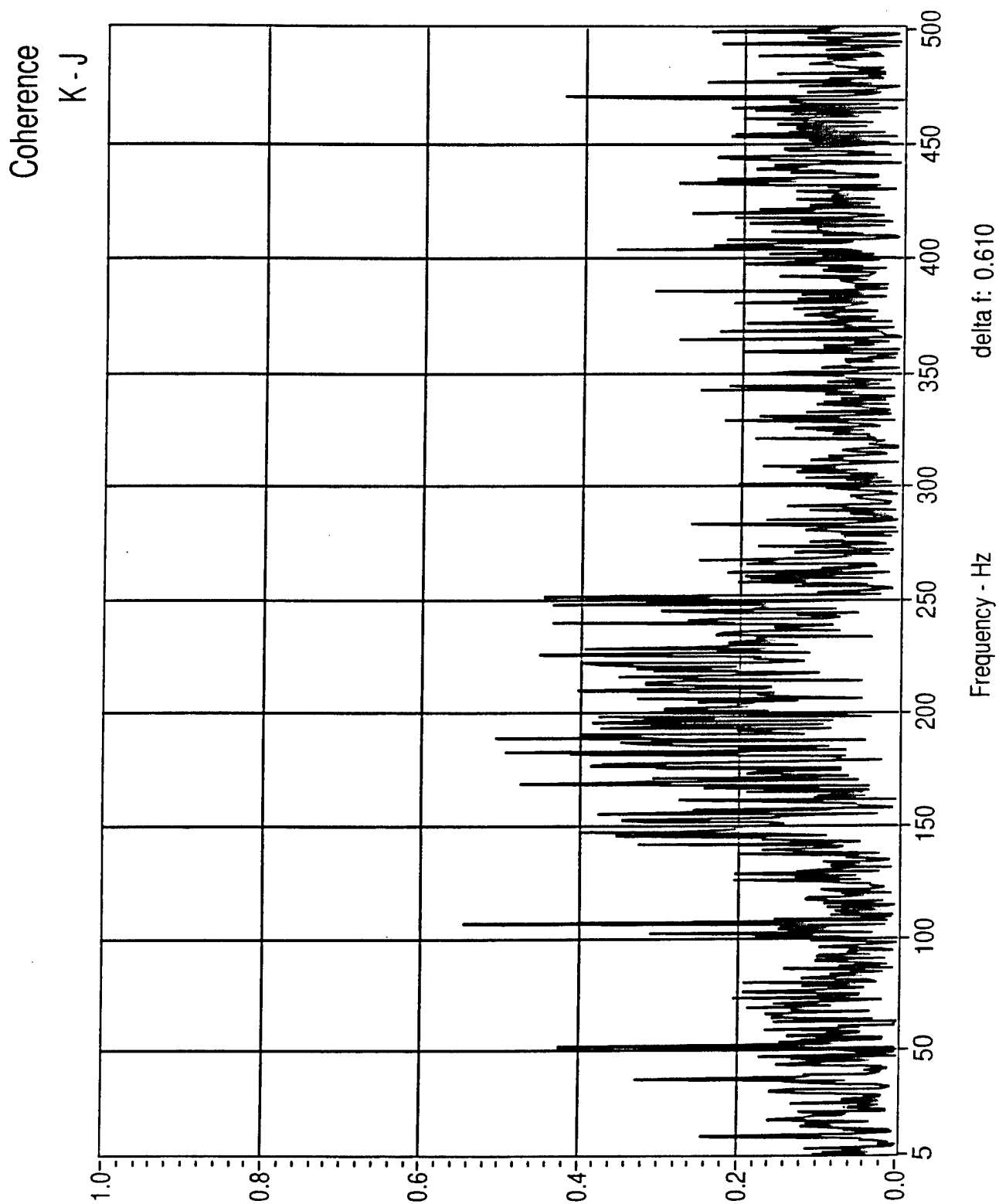




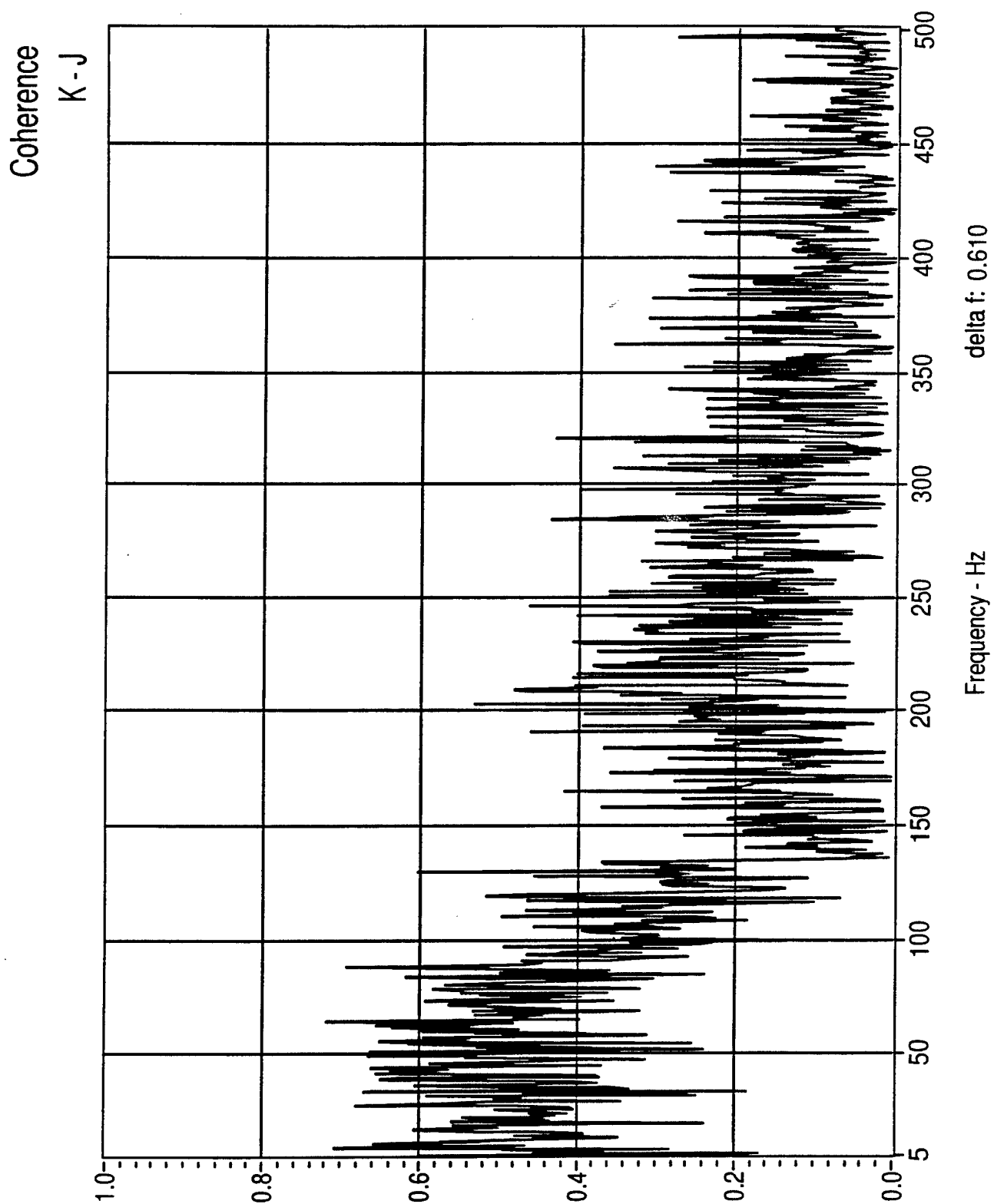
F-15 TPN\_2864: alpha=8 beta=-4 bp=0



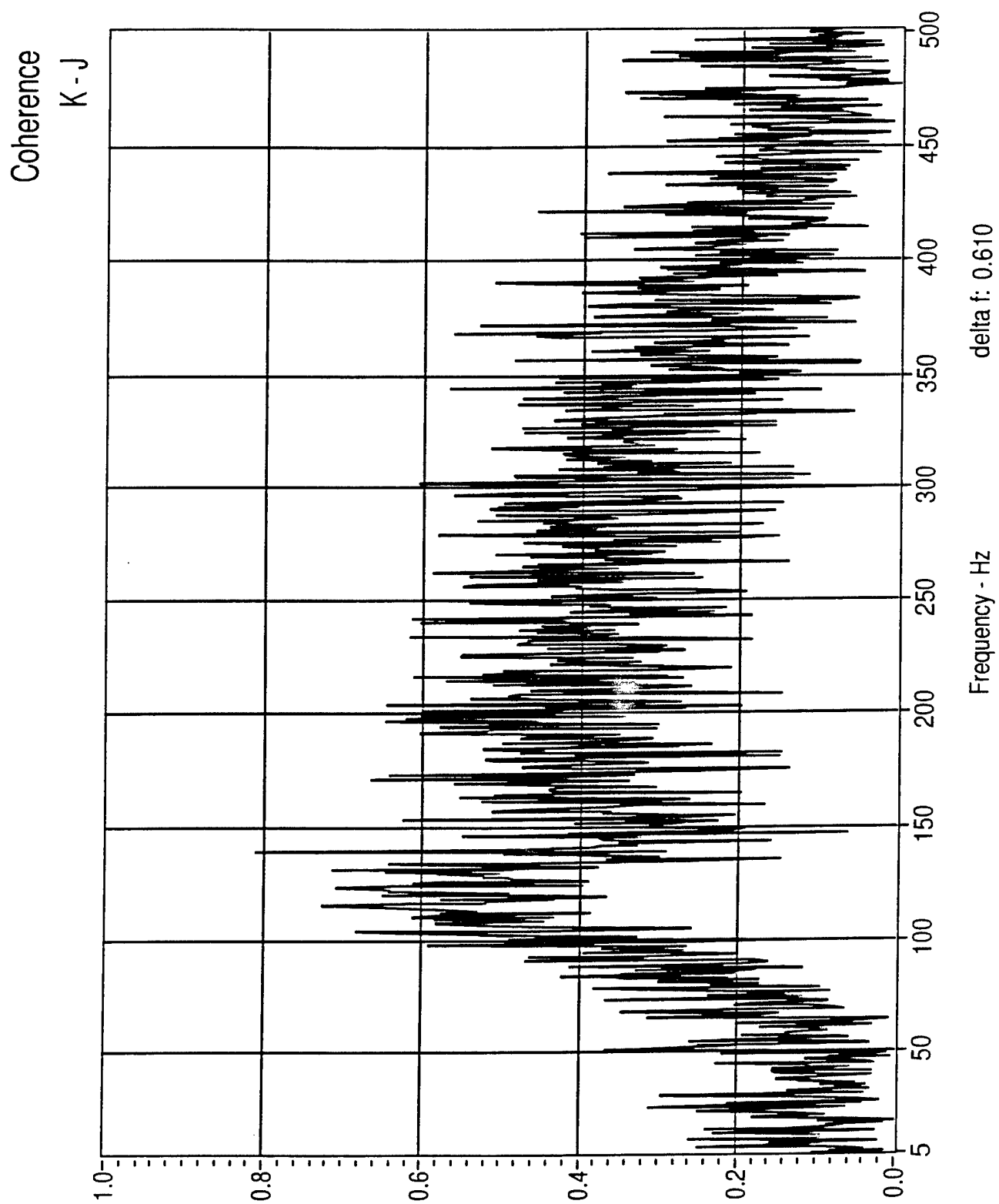
F-15 TPN\_2870:  $\alpha=20$   $\beta=-4$   $\text{bp}=0$



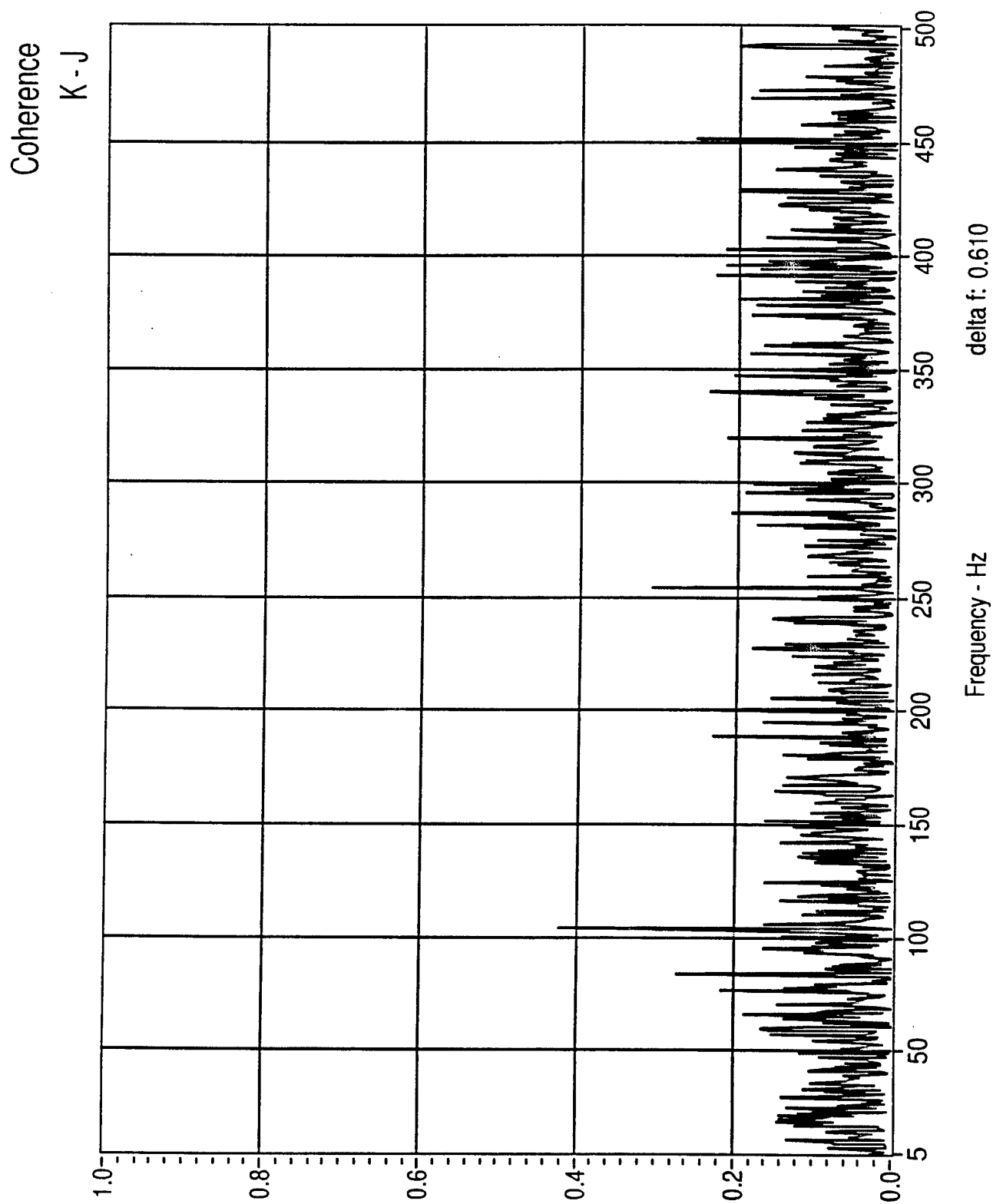
F-15 TPN\_2872: alpha=24 beta=-4 bp=0



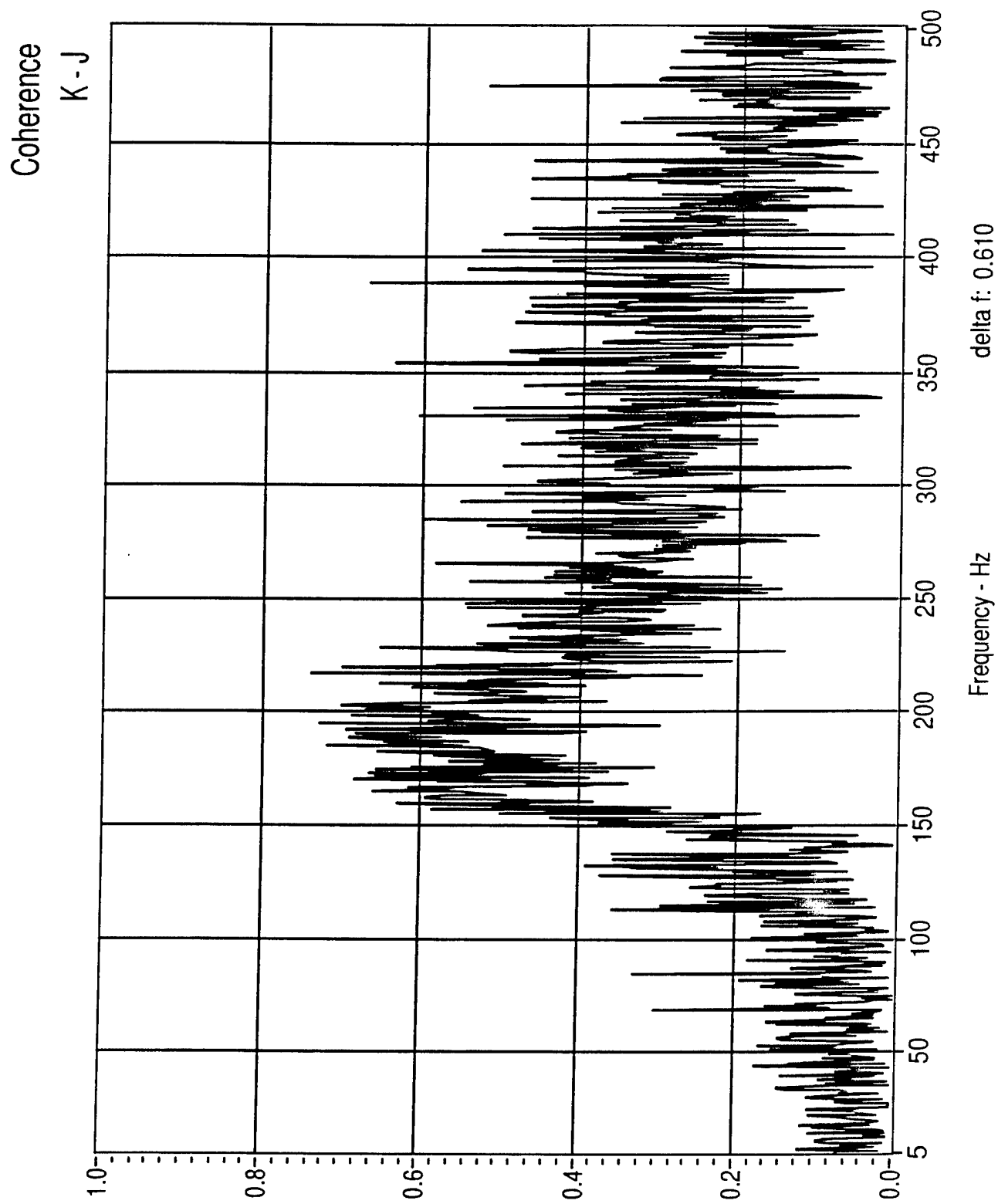
F-15 TPN\_2874: alpha=32 beta=-4 bp=0



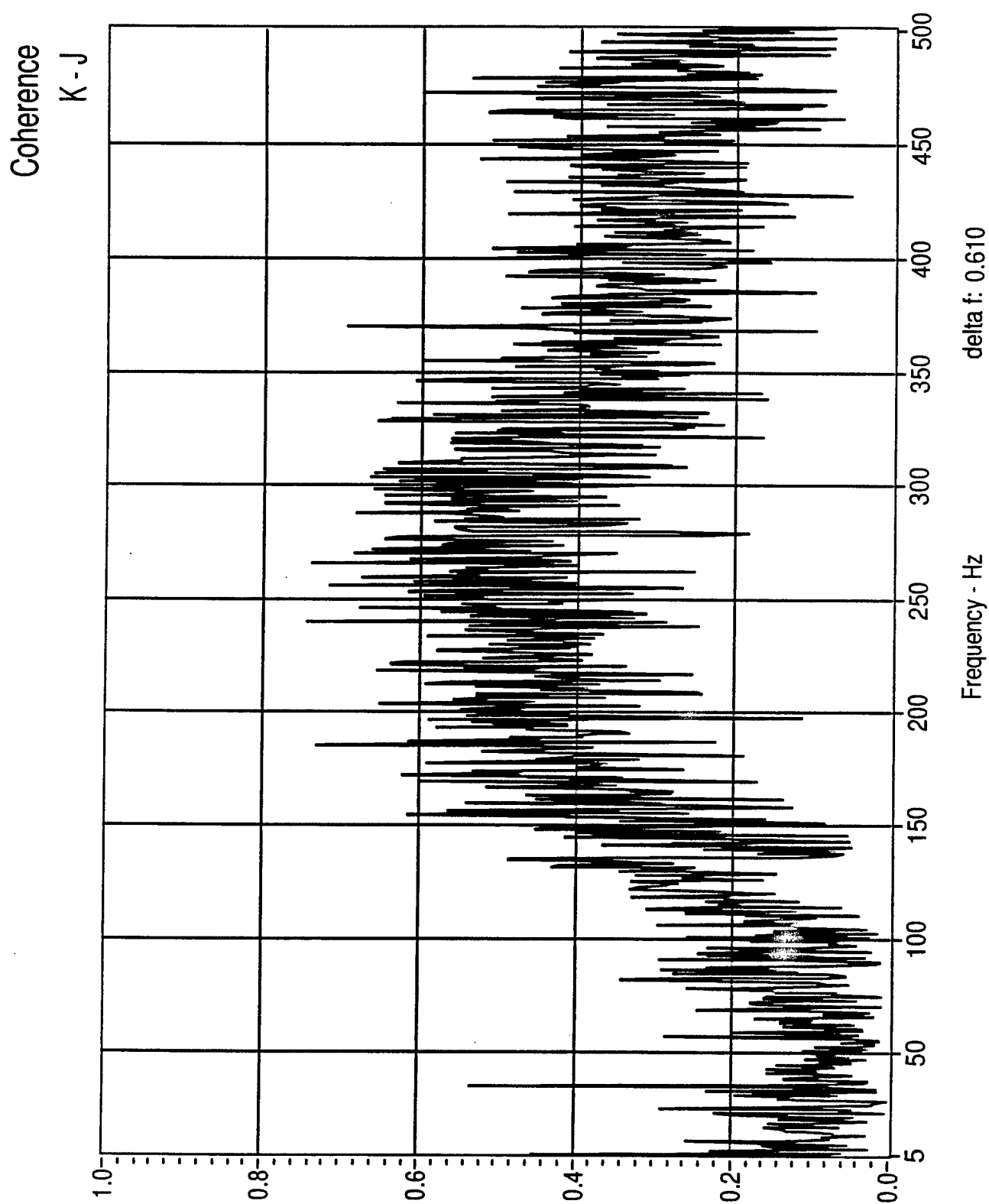
F-15 TPN\_3351: alpha=8 beta=4 bp=45



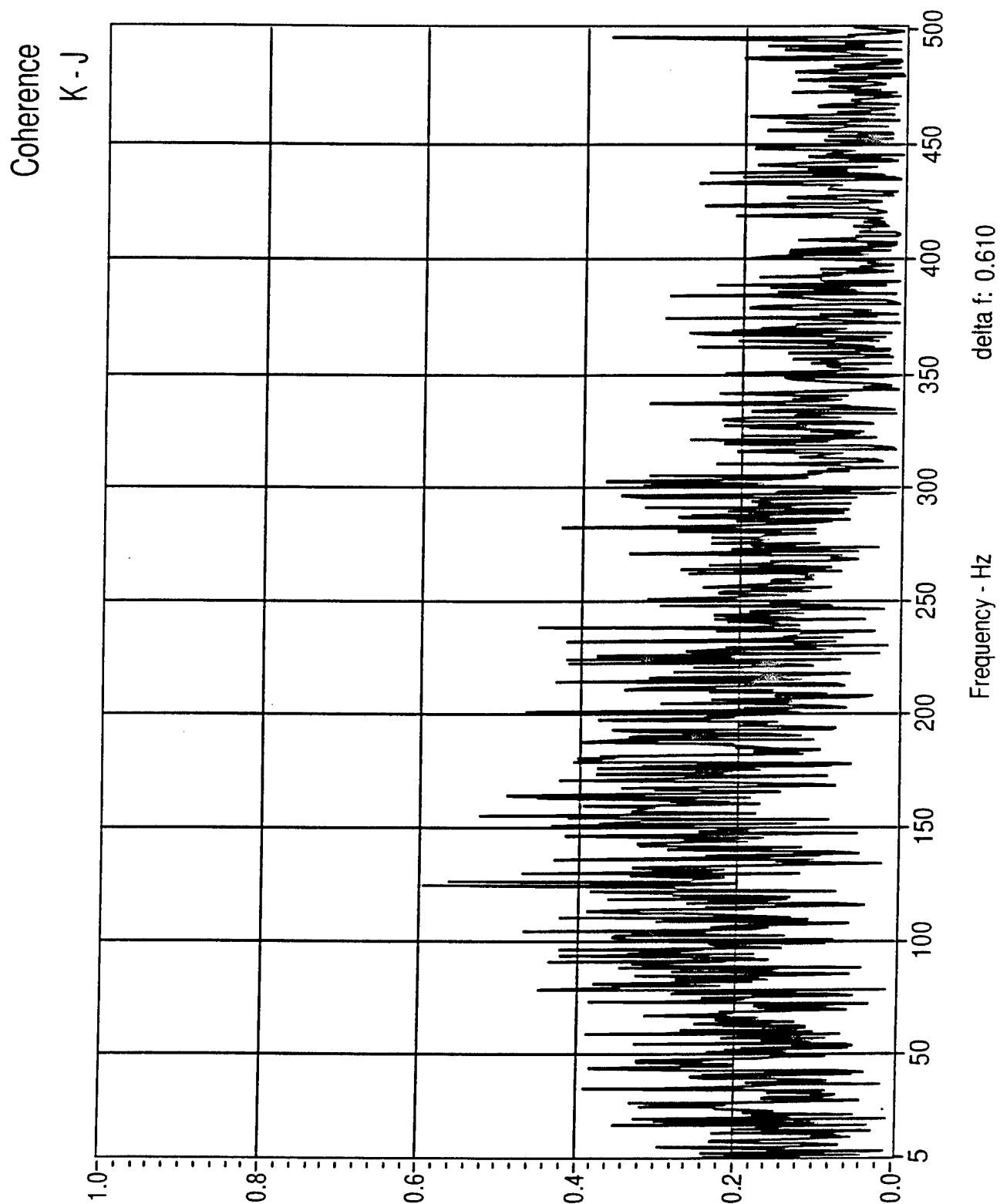
F-15 TPN\_3357: alpha=20 beta=4 bp=45



F-15 TPN\_3359: alpha=24 beta=4 bp=45

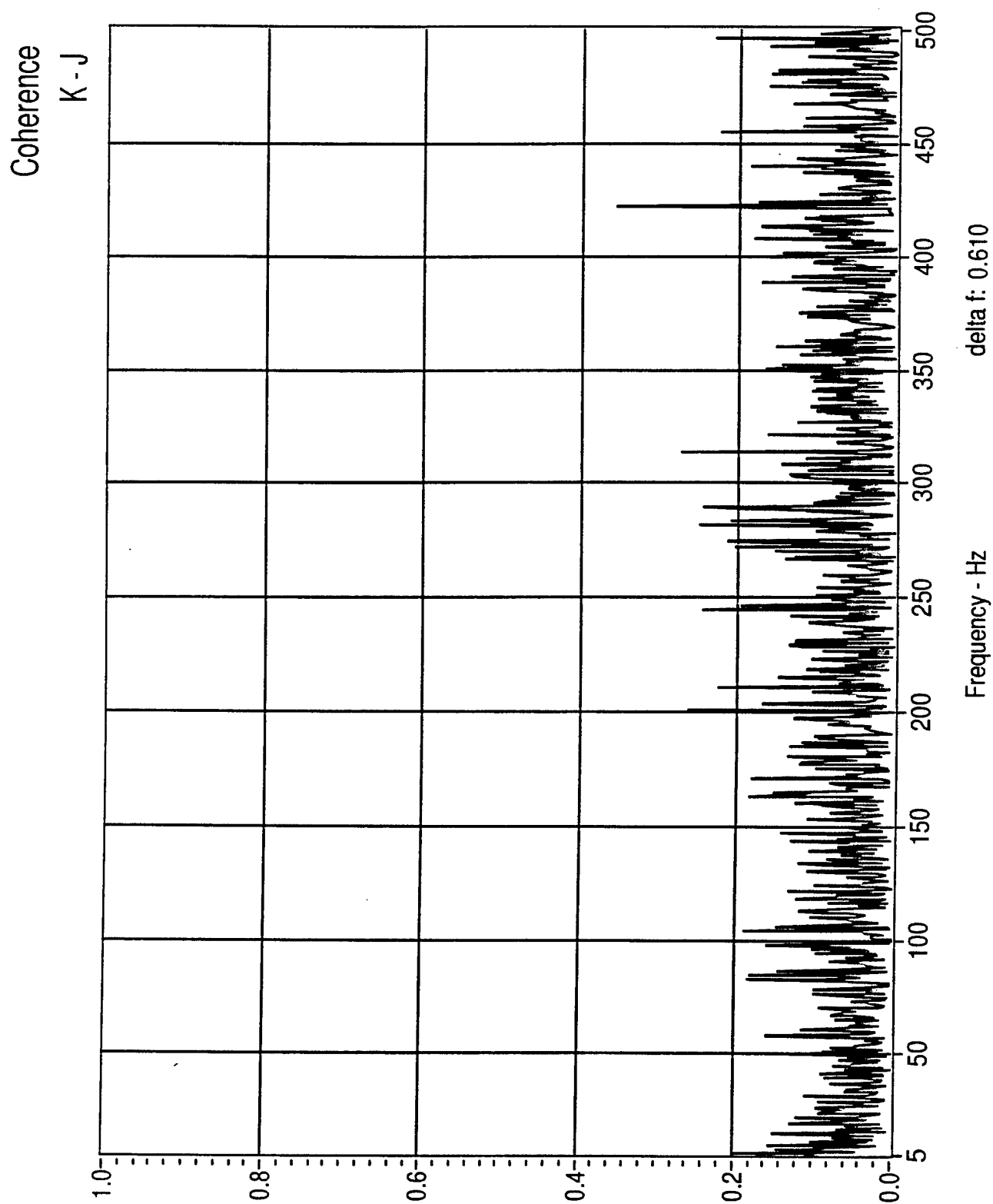


F-15 TPN\_3361: alpha=32 beta=4 bp=45

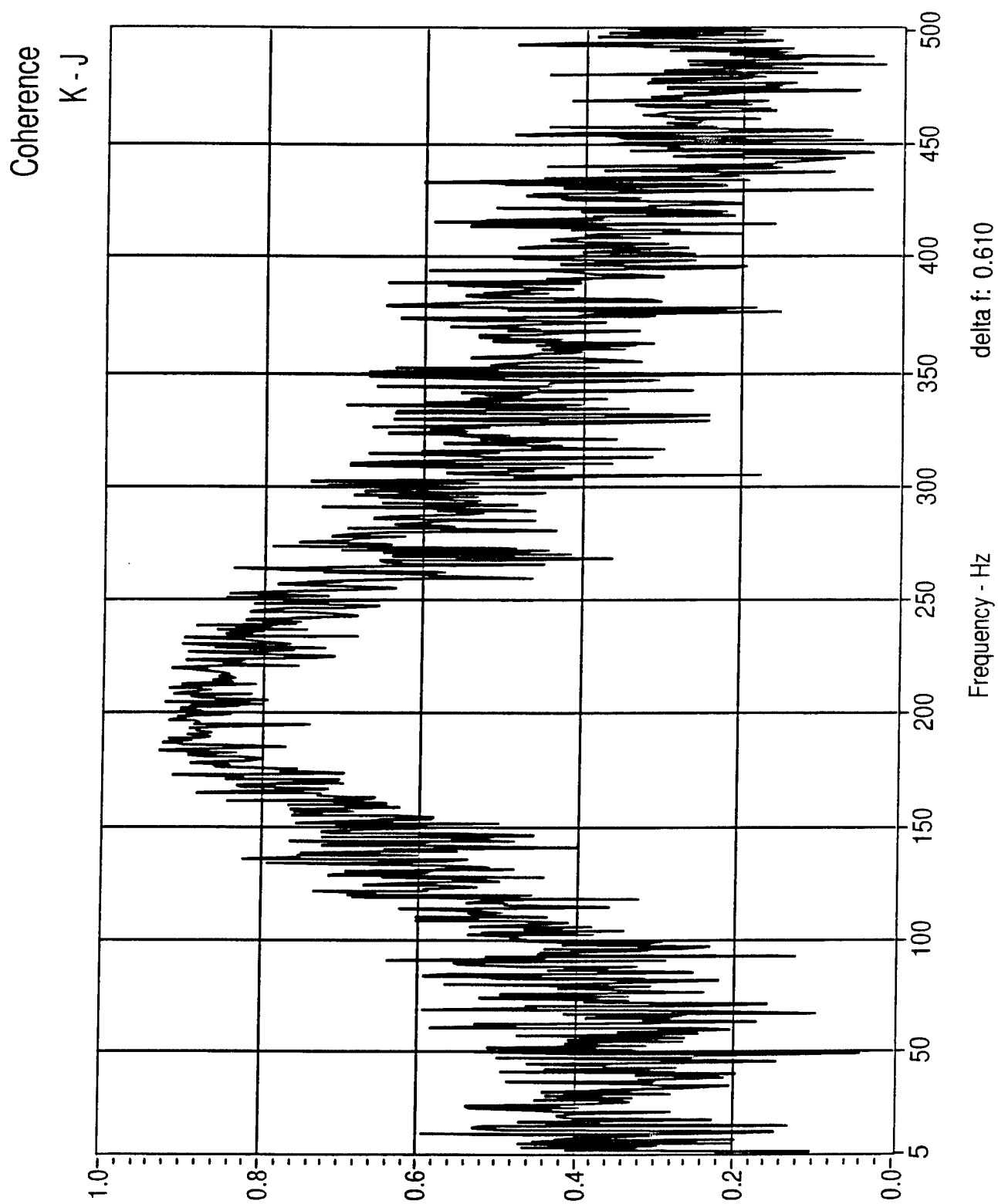




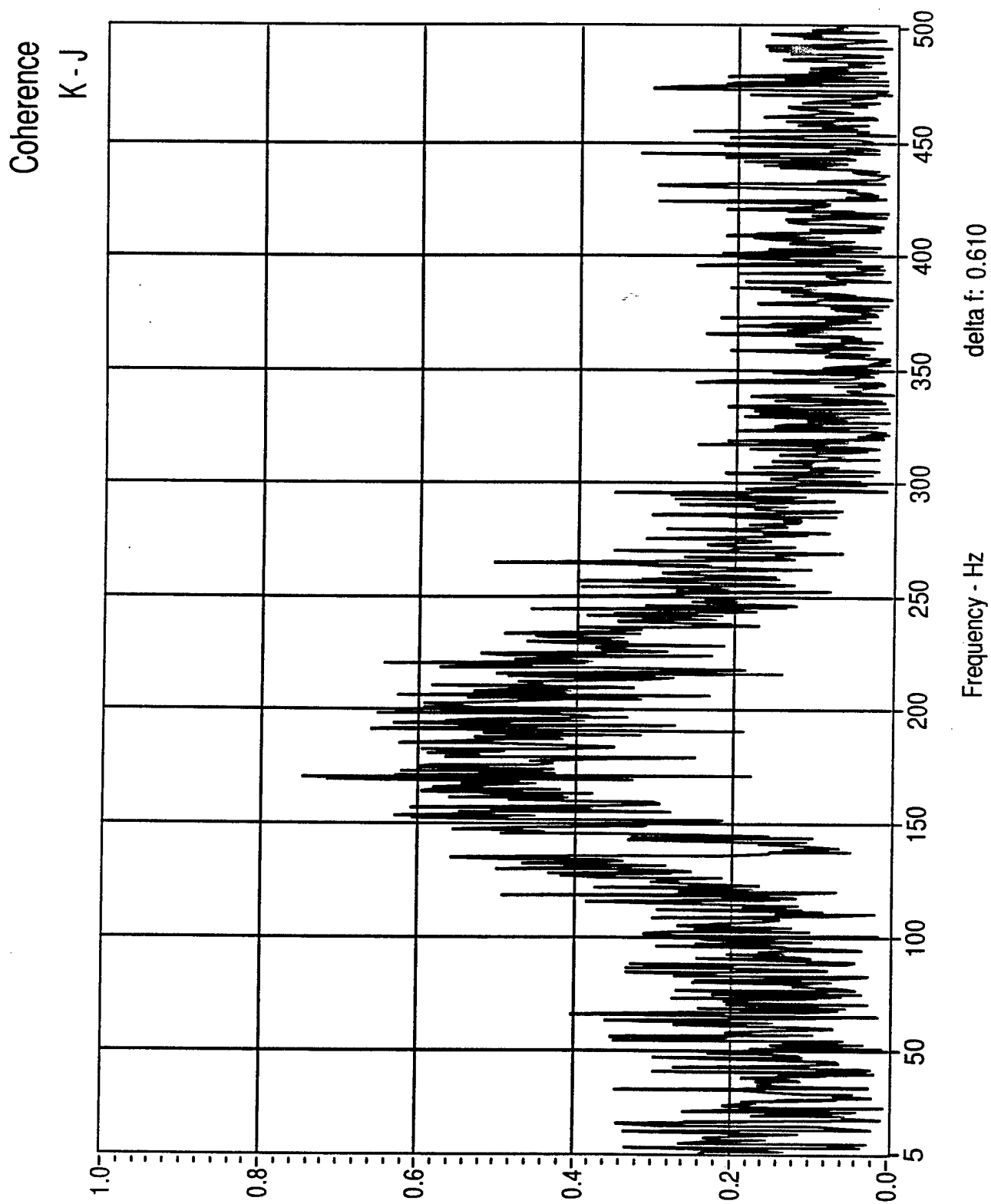
F-15 TPN\_3333: alpha=8 beta=0 bp=45



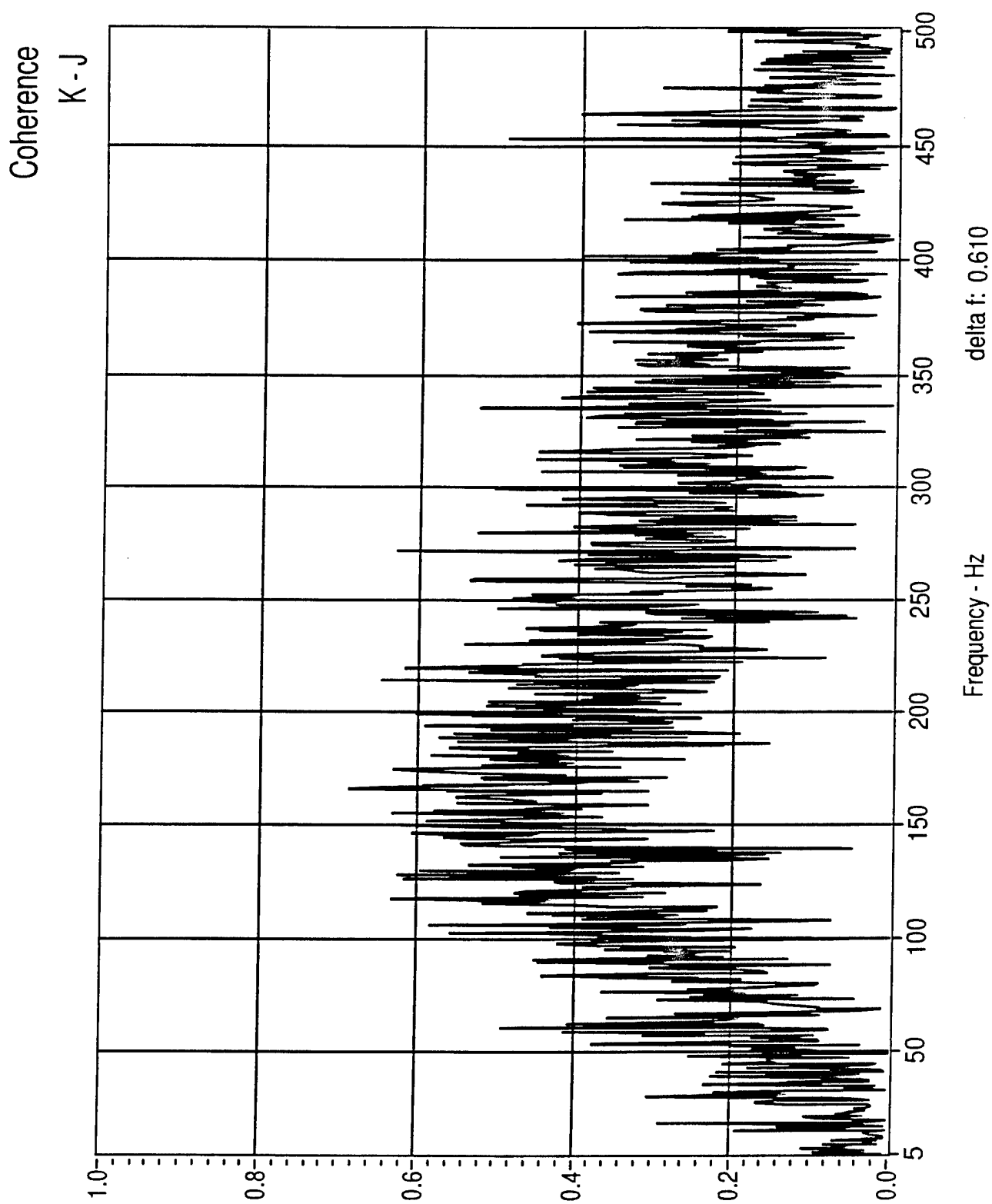
F-15 TPN\_3339: alpha=20 beta=0 bp=45



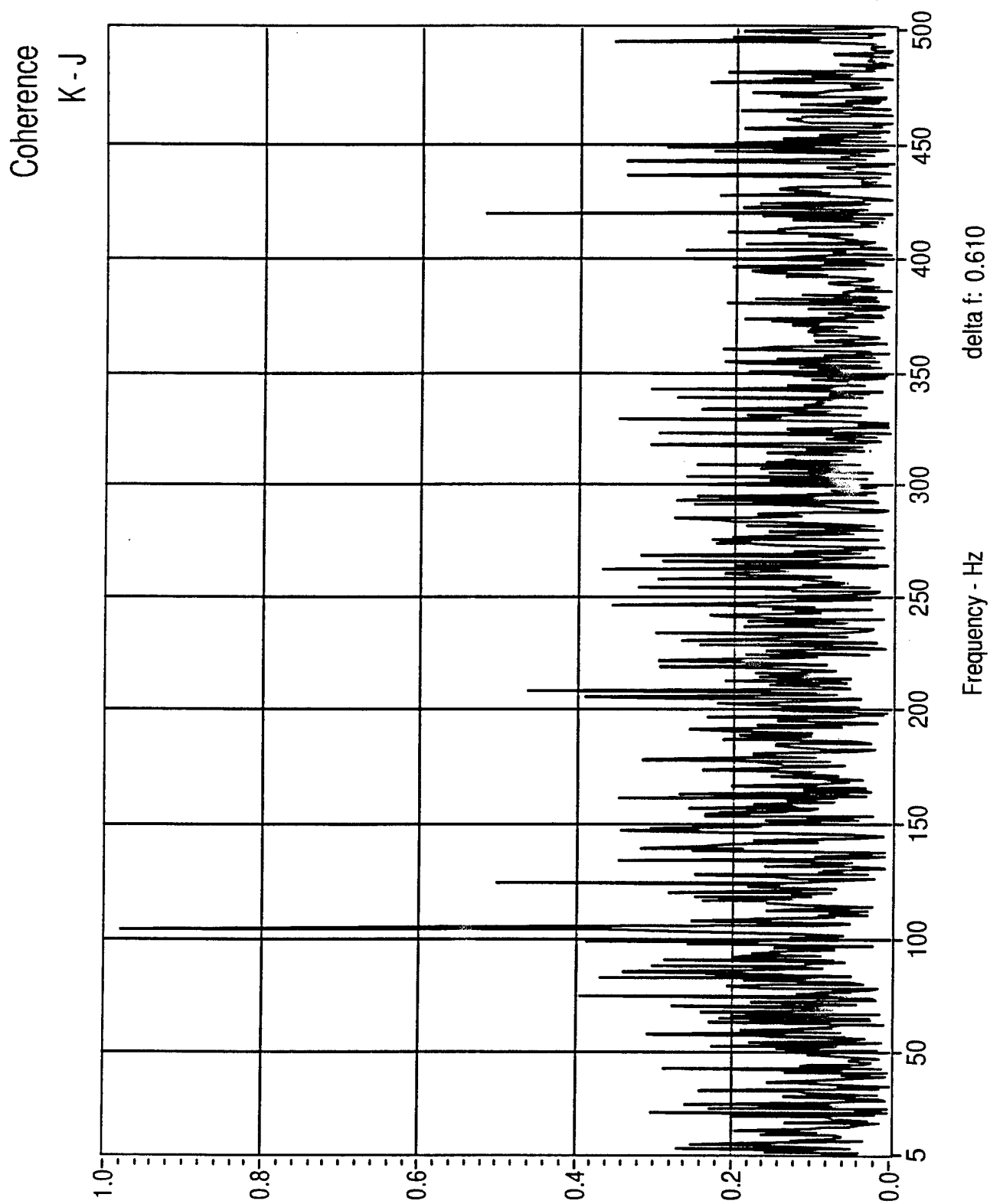
F-15 TPN\_3341: alpha=24 beta=0 bp=45



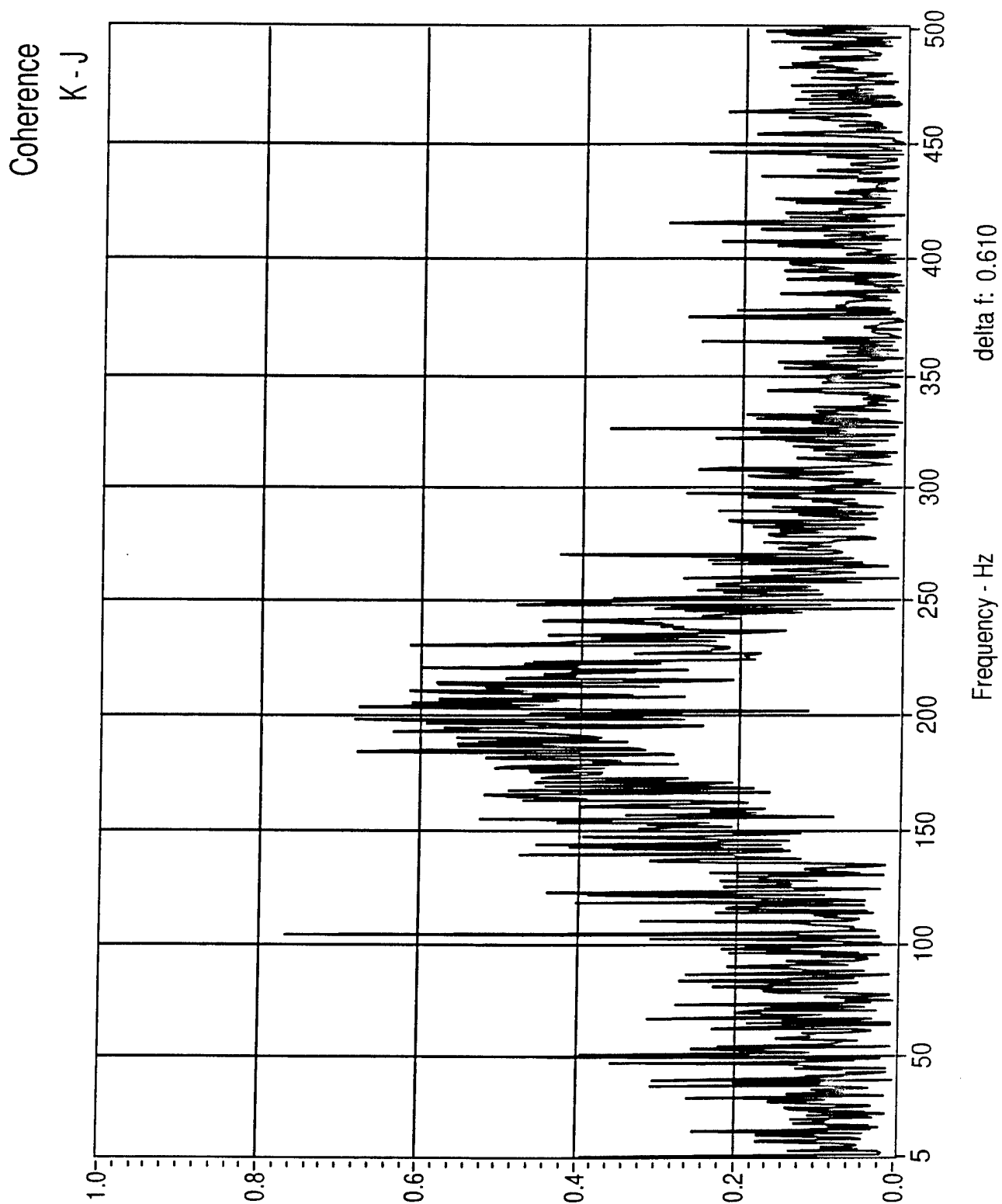
F-15 TPN\_3343: alpha=32 beta=0 bp=45



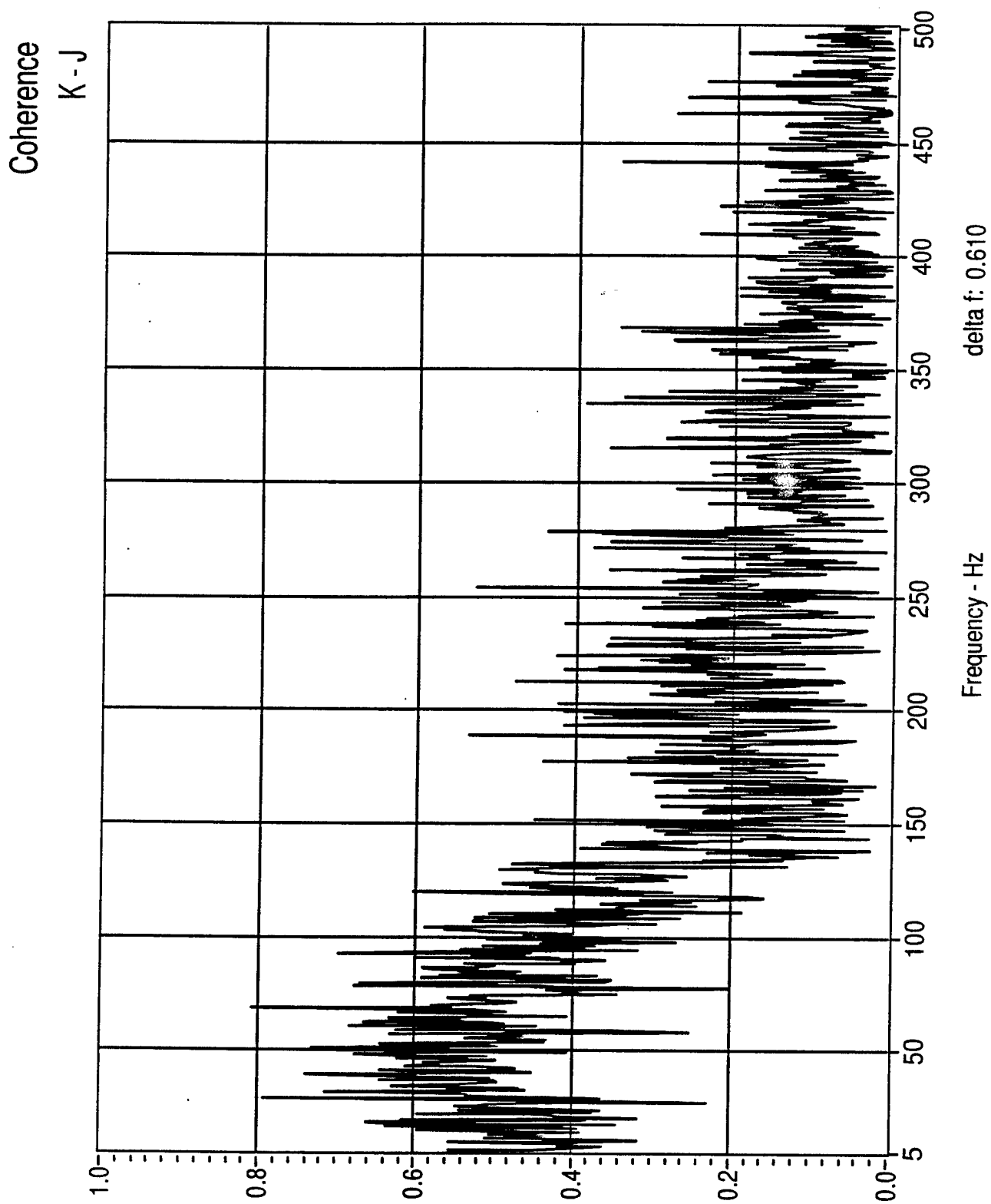
F-15 TPN\_3369: alpha=8 beta=-4 bp=45



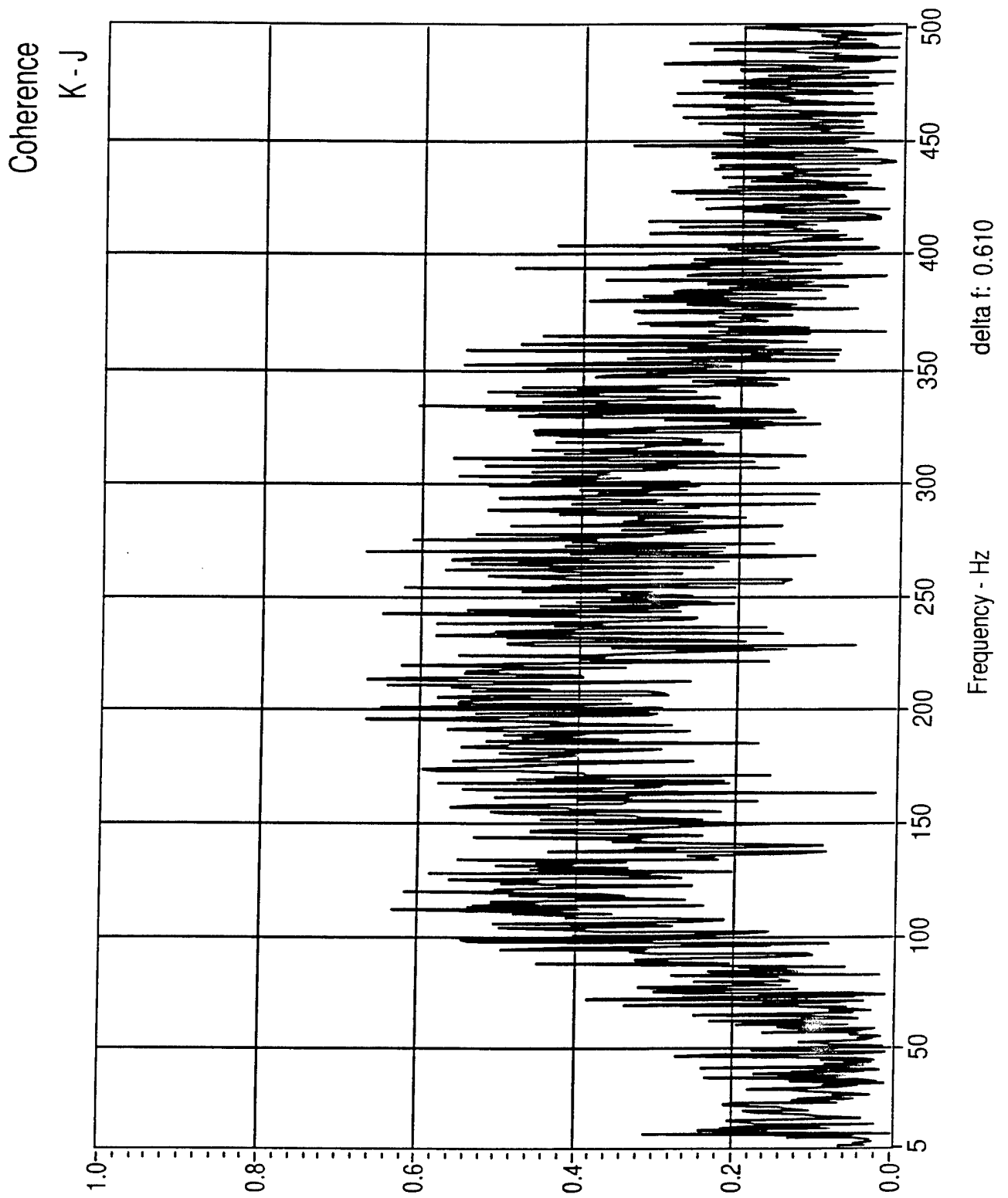
F-15 TPN\_3375: alpha=20 beta=-4 bp=4



F-15 TPN\_3377: alpha=24 beta=-4 bp=45

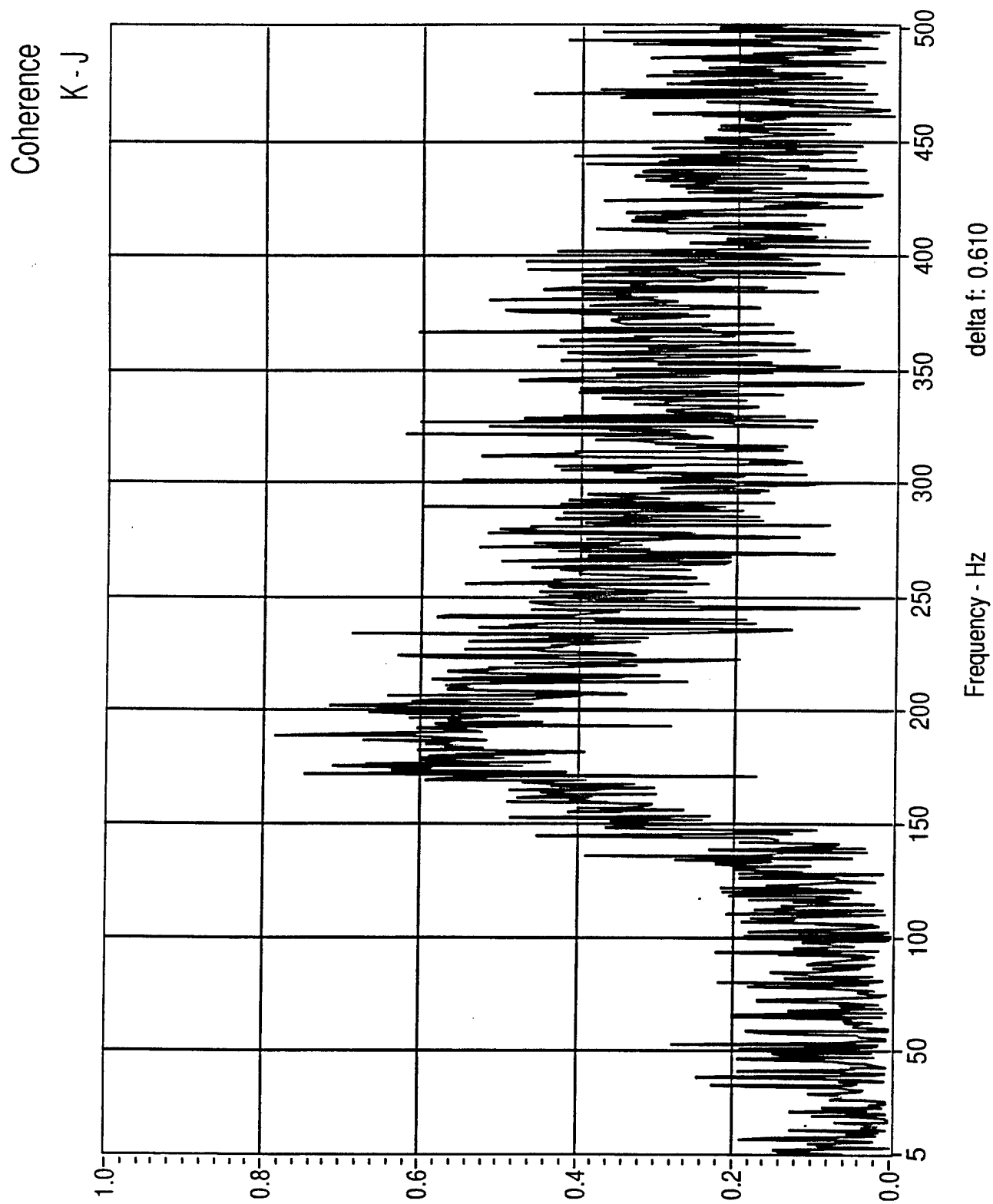


F-15 TPN\_3379: alpha=32 beta=-4 bp=45

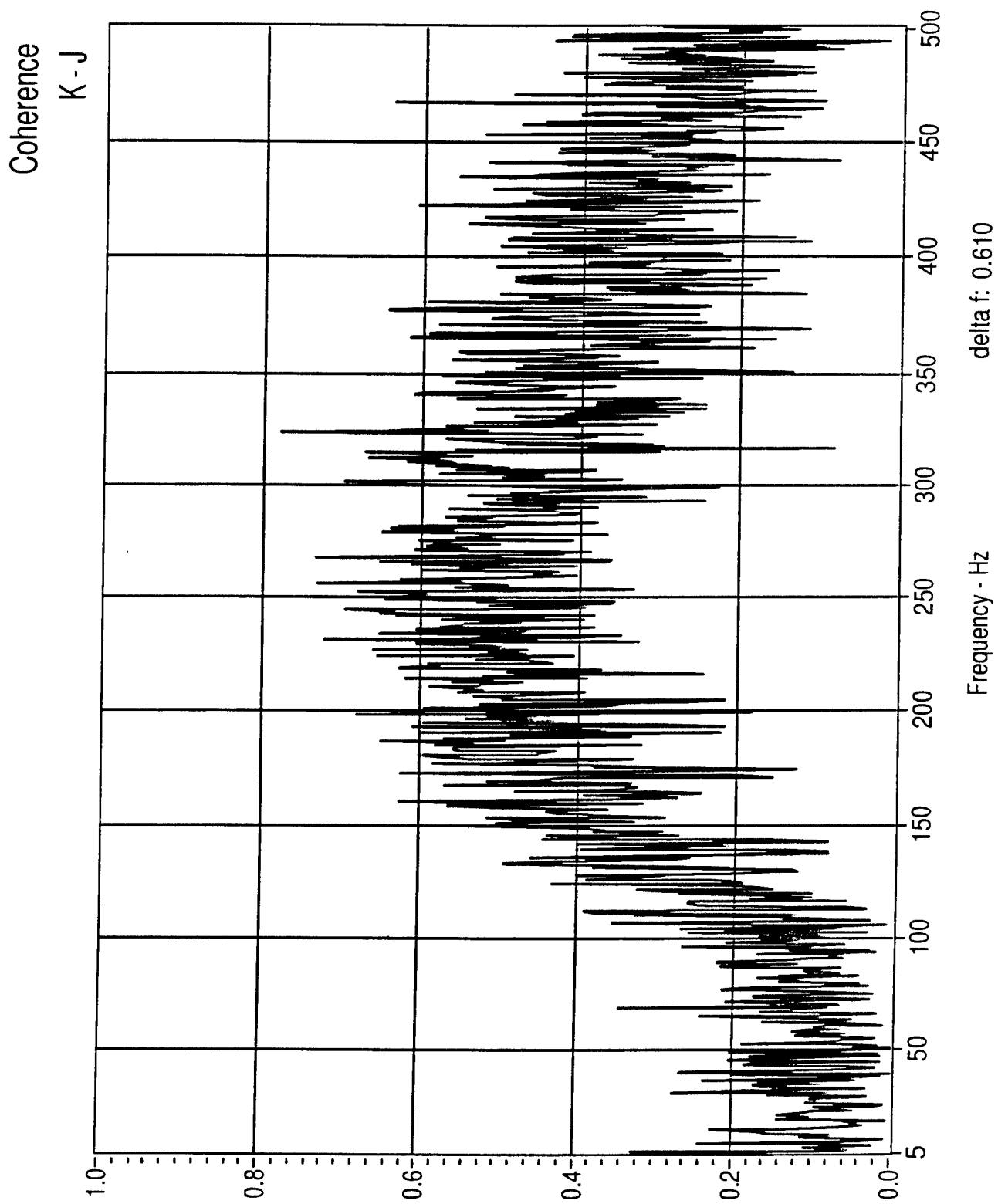




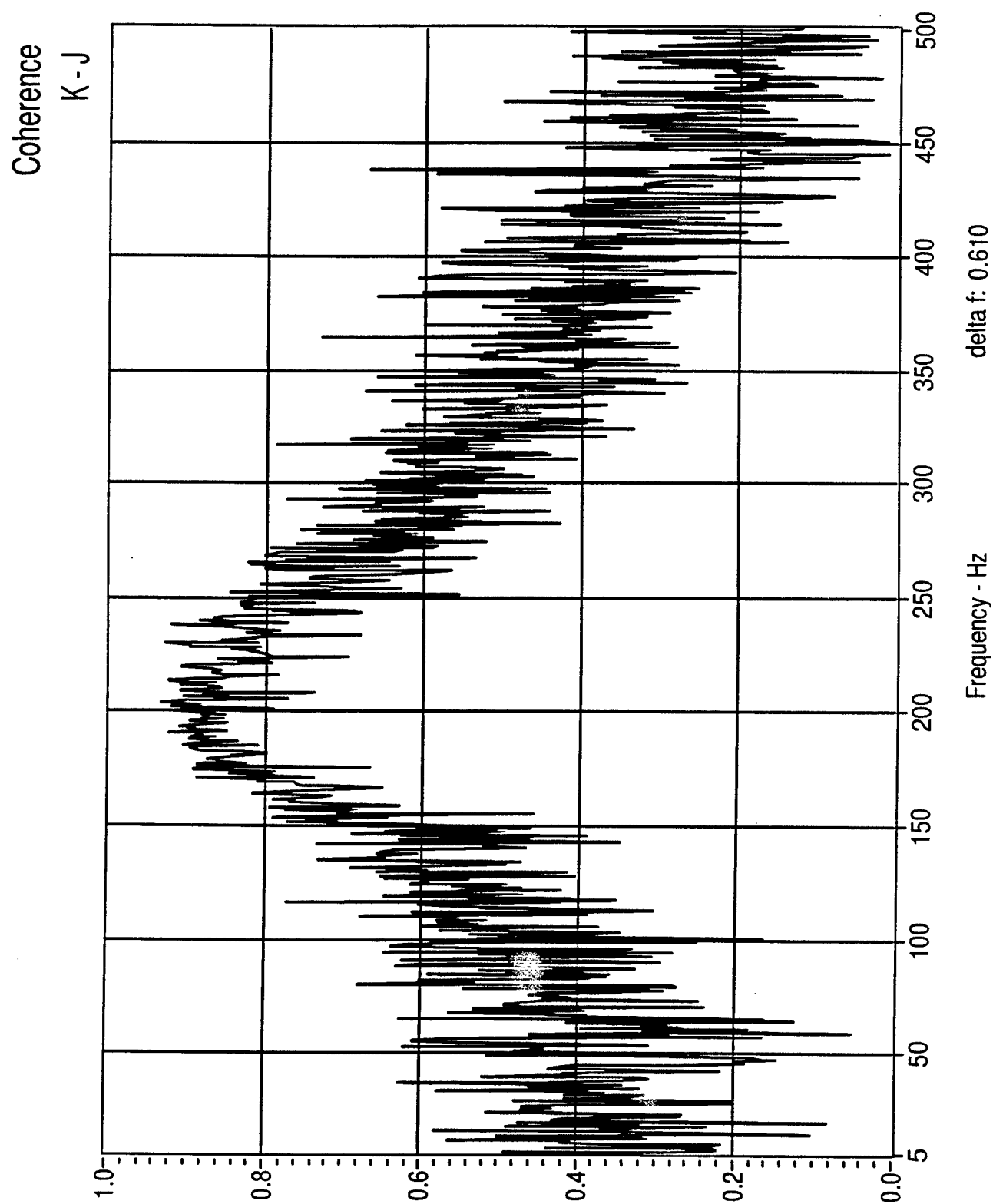
F-15 TPN\_3046: alpha=20 beta=4 bp=65



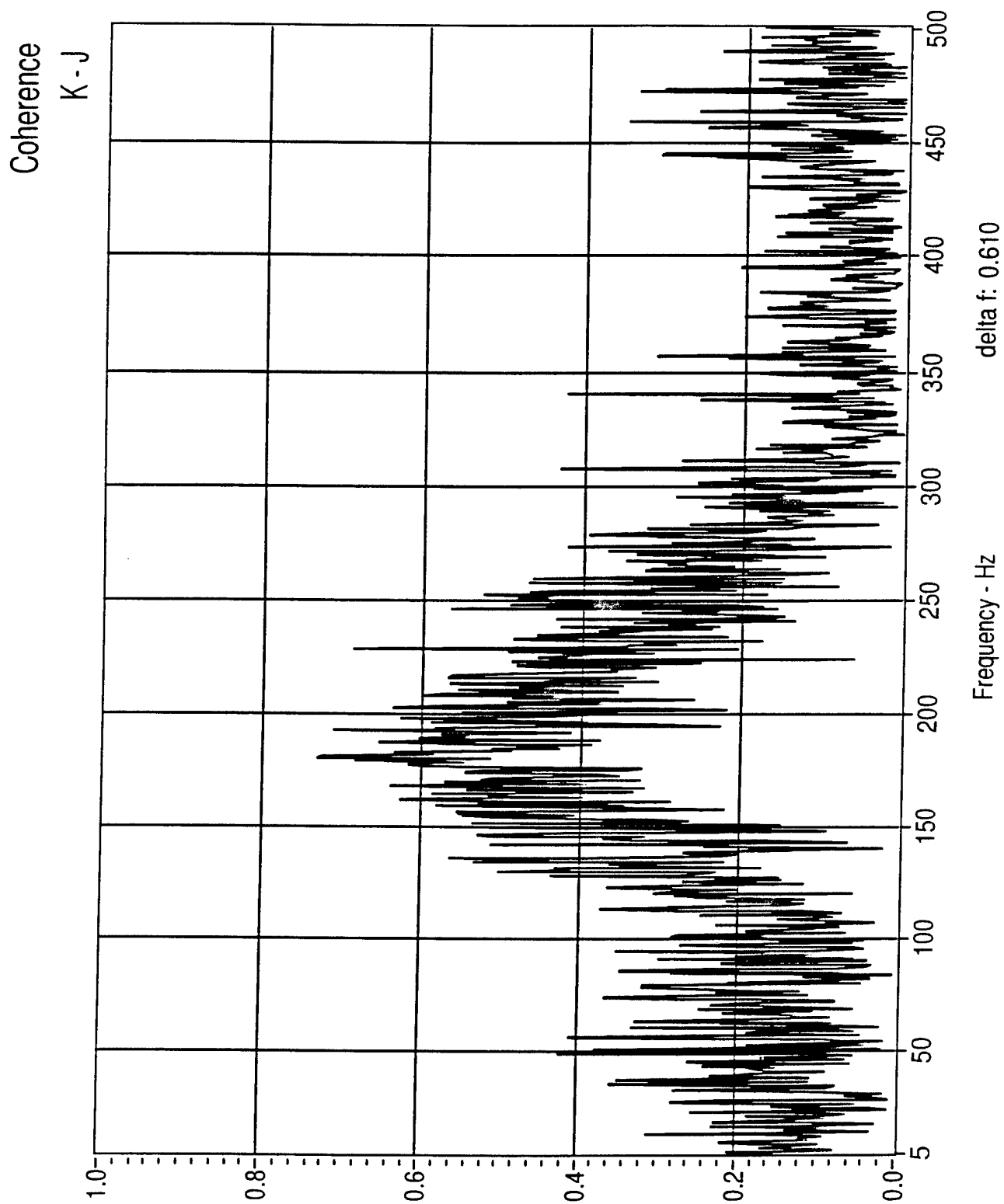
F-15 TPN\_3048: alpha=24 beta=4 bp=65



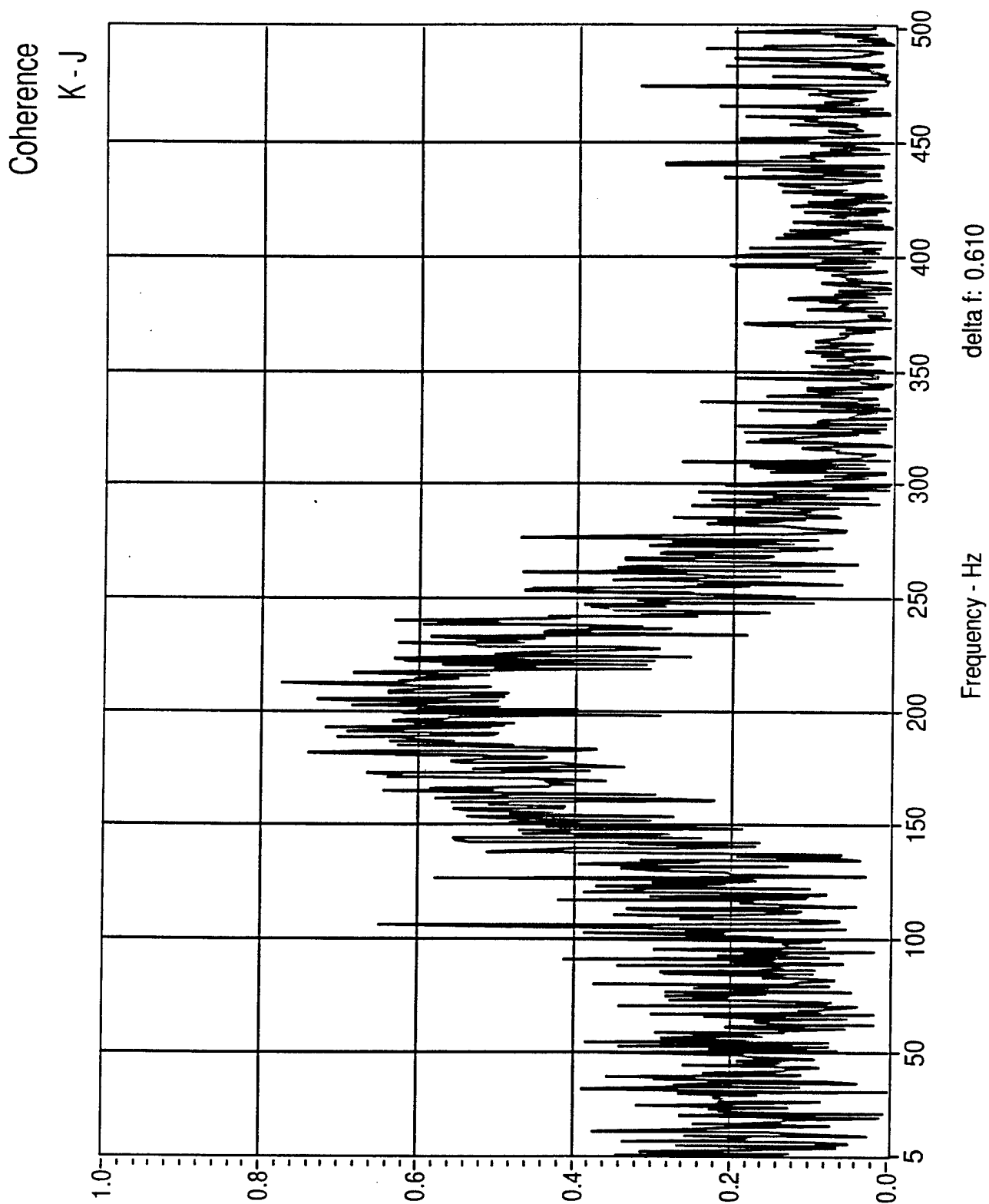
F-15 TPN\_3040: alpha=20 beta=0 bp=65



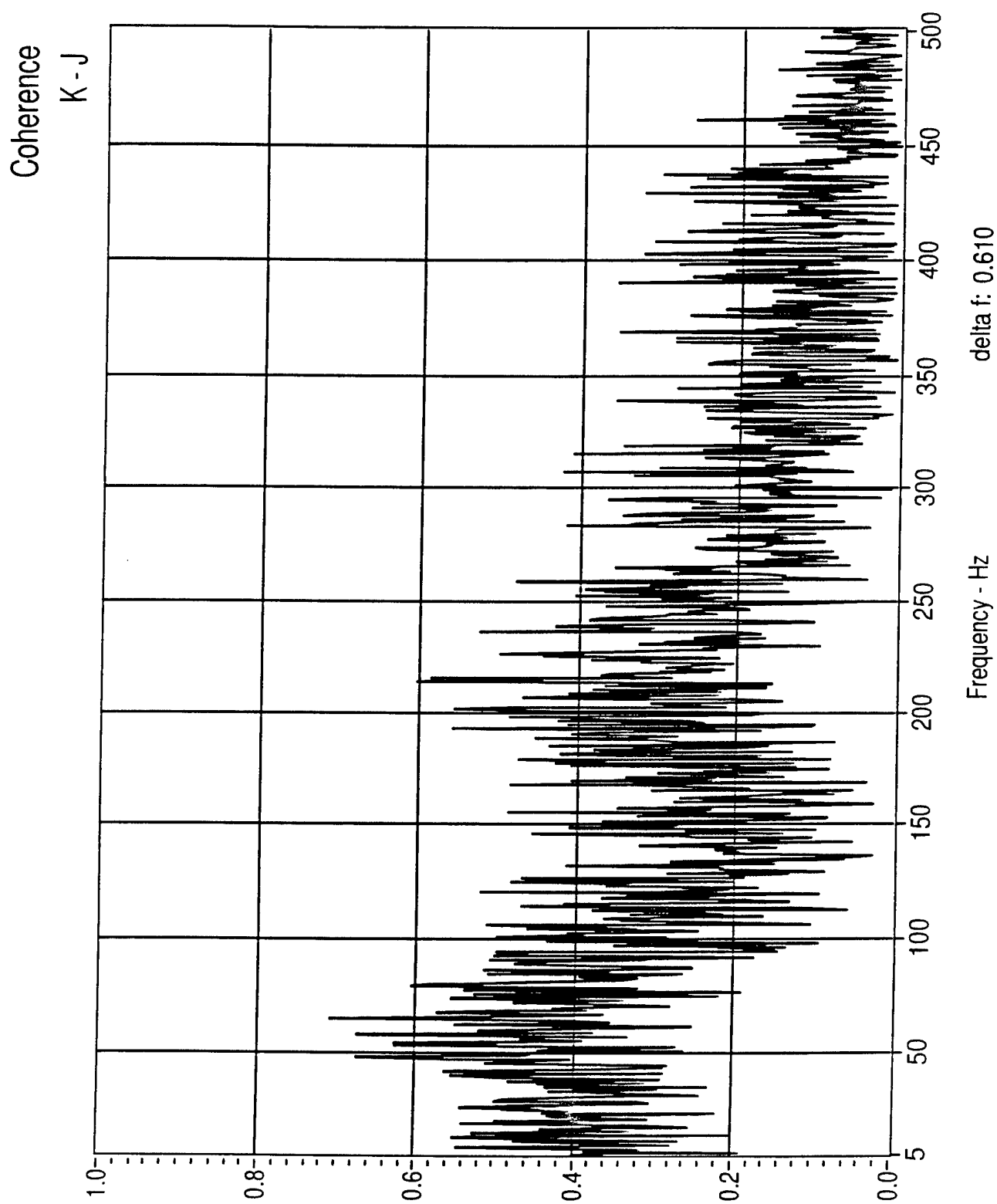
F-15 TPN\_3042: alpha=24 beta=0 bp=65



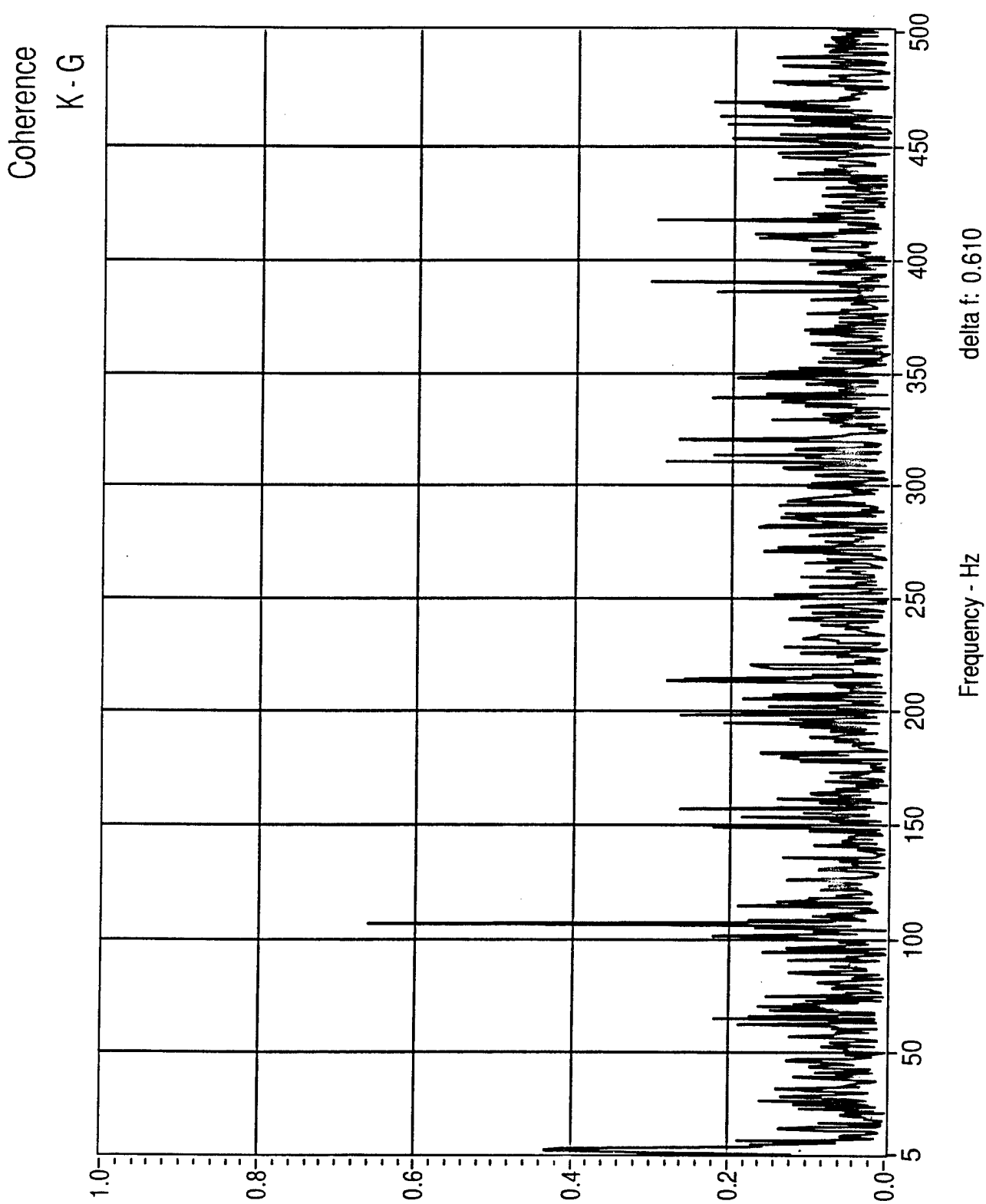
F-15 TPN\_3034: alpha=20 beta=-4 bp=65



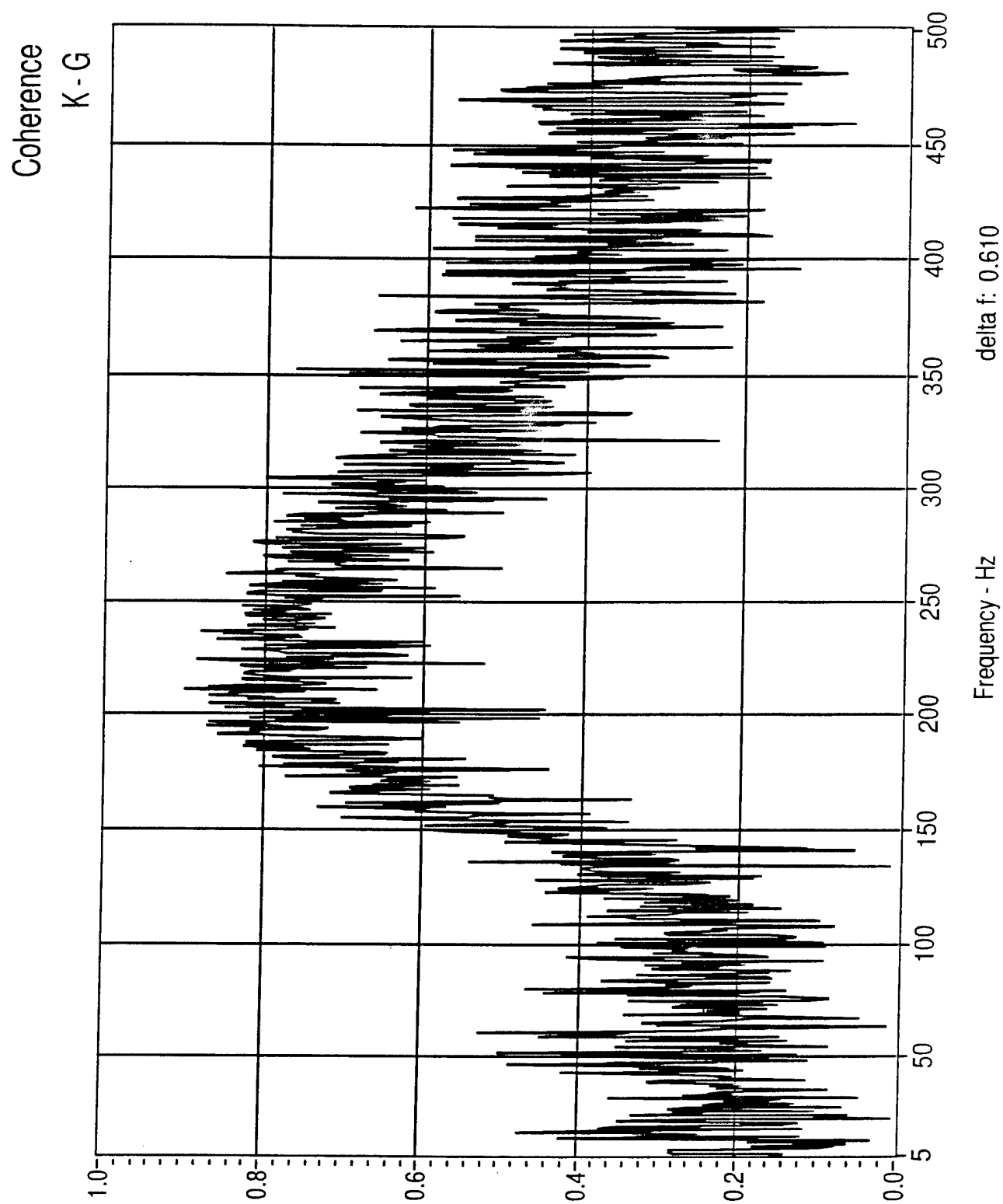
F-15 TPN\_3036: alpha=24 beta=-4 bp=65



F-15 TPN\_2918: alpha=8 beta=4 bp=0

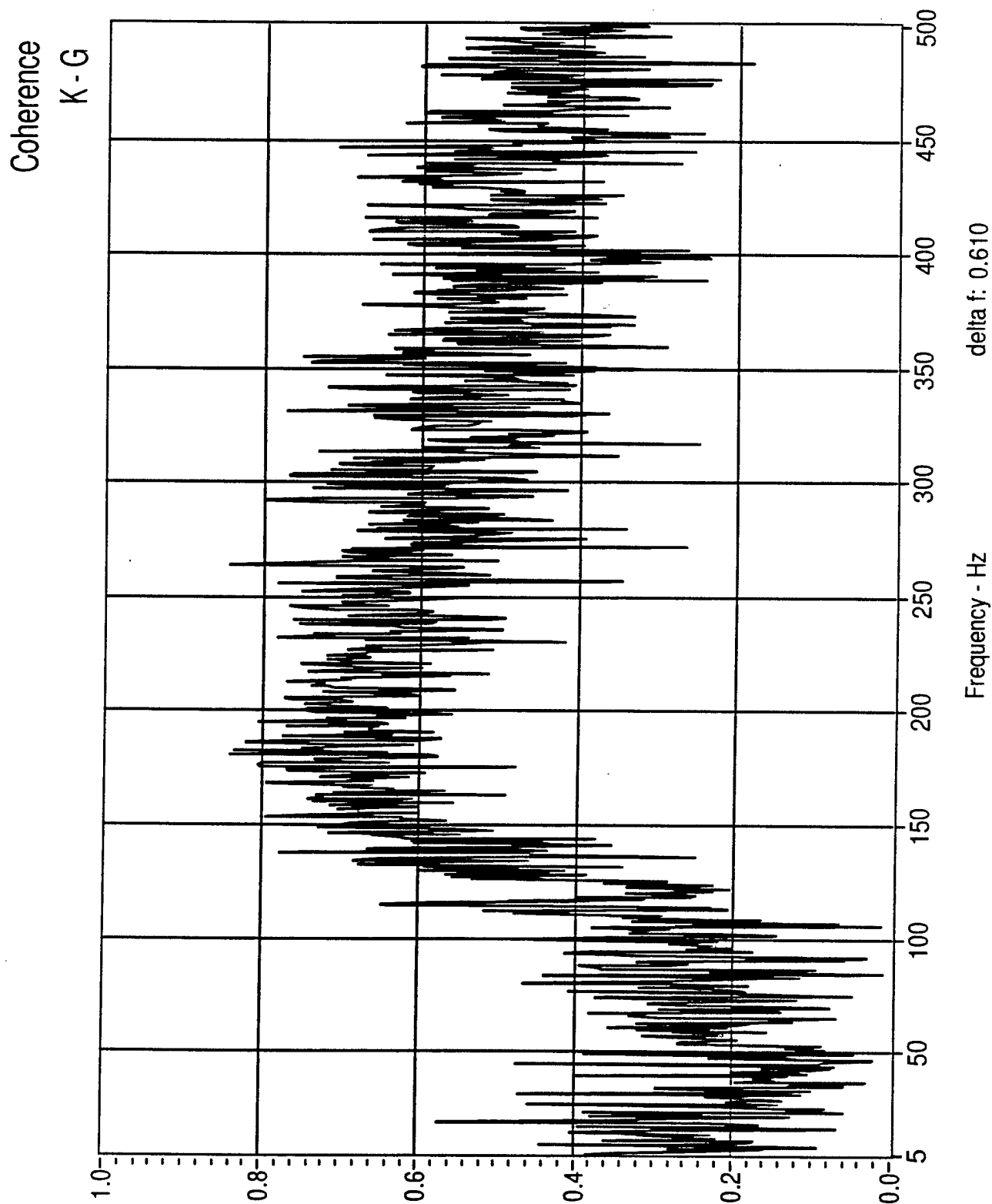


F-15 TPN\_2924: alpha=20 beta=4 bp=0

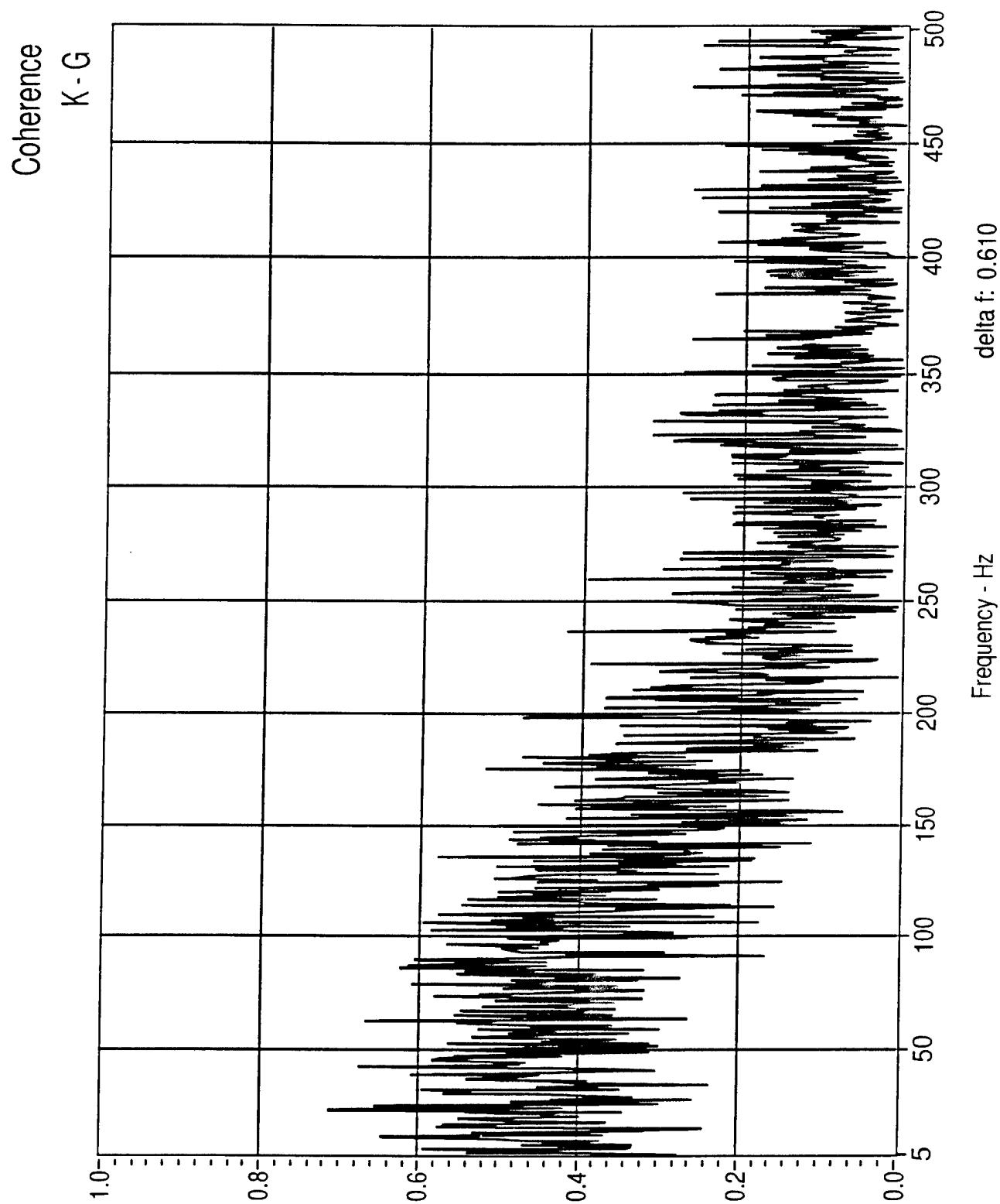




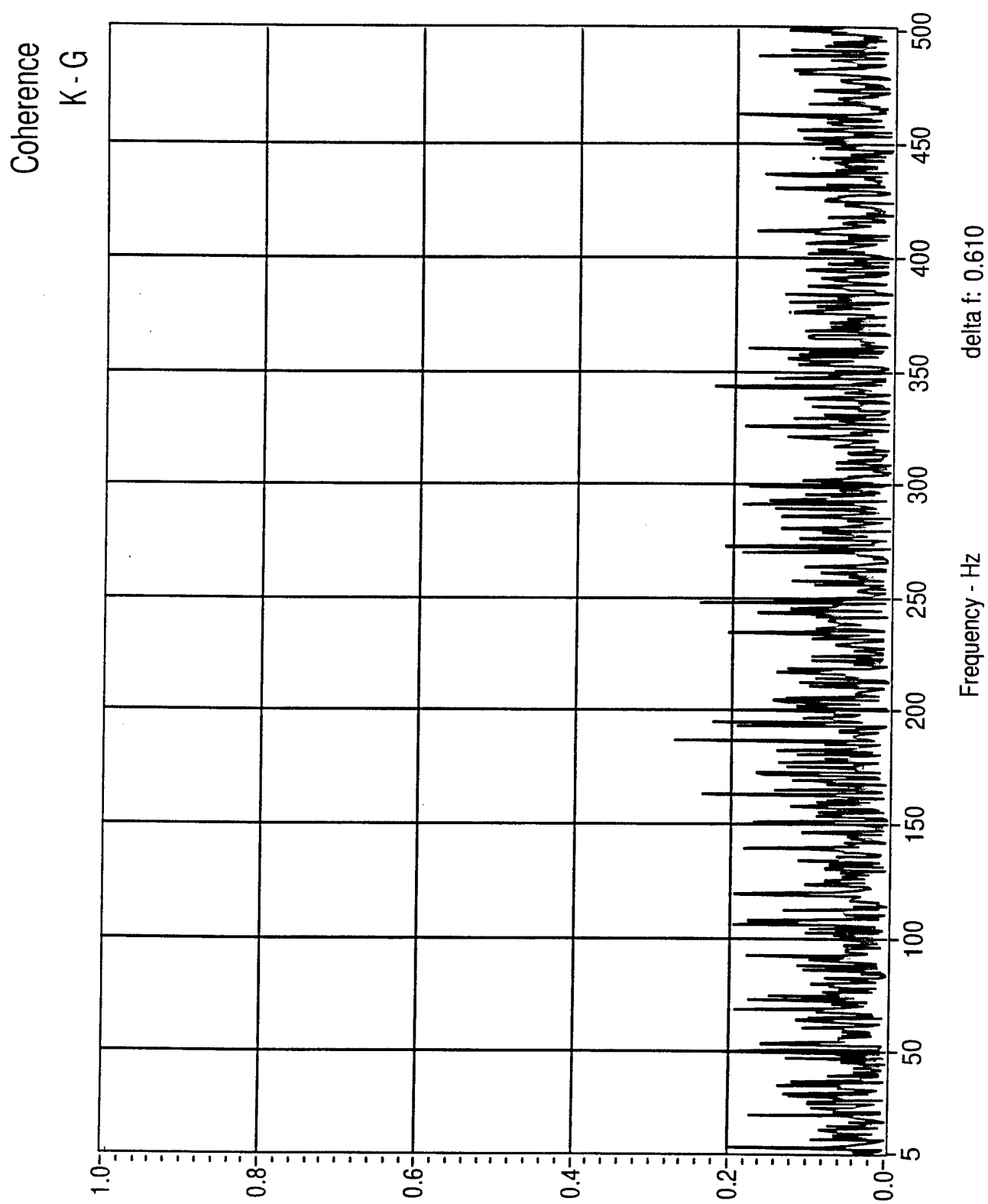
F-15 TPN\_2926: alpha=24 beta=4 bp=0



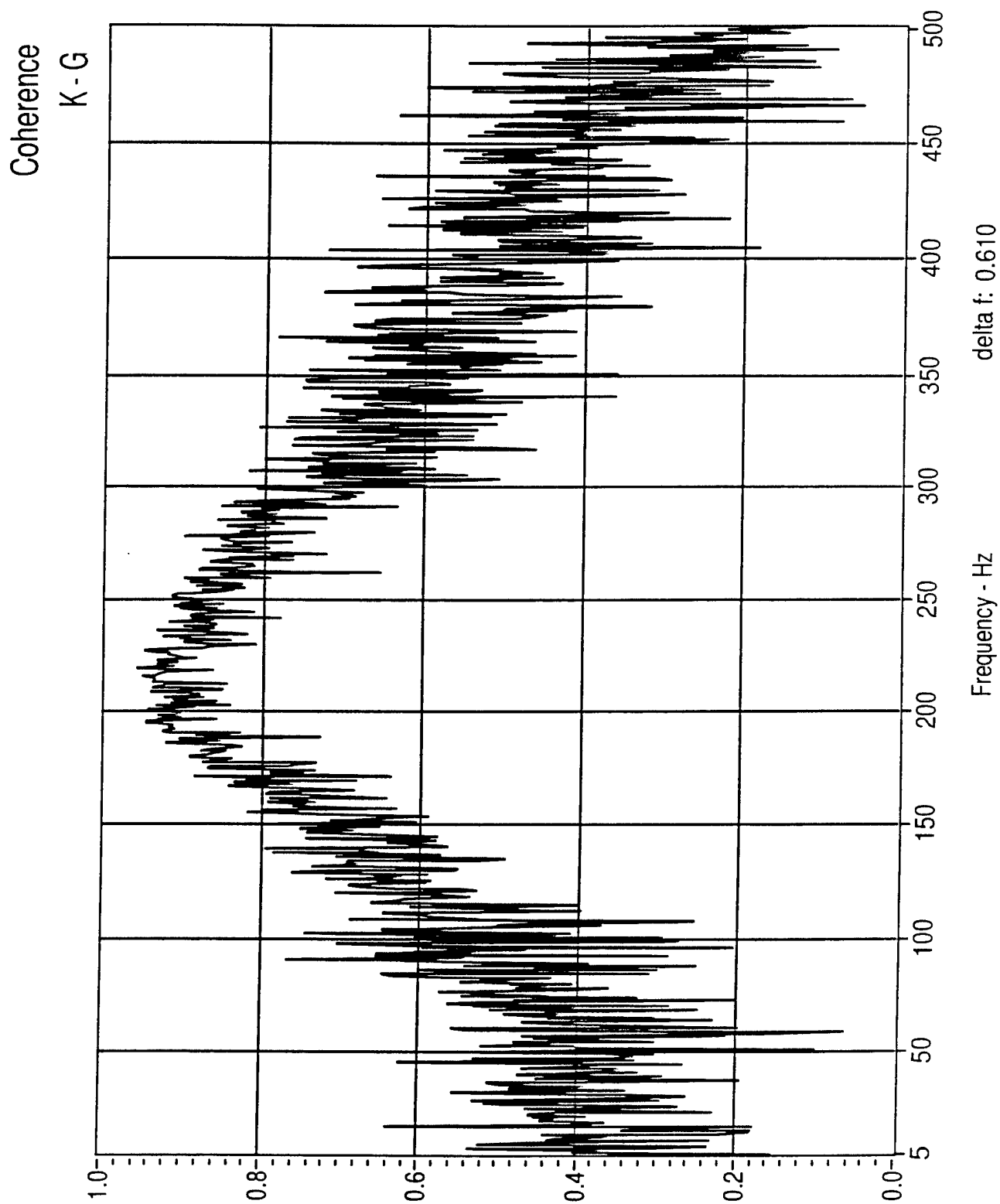
F-15 TPN\_2928: alpha=32 beta=4 bp=0



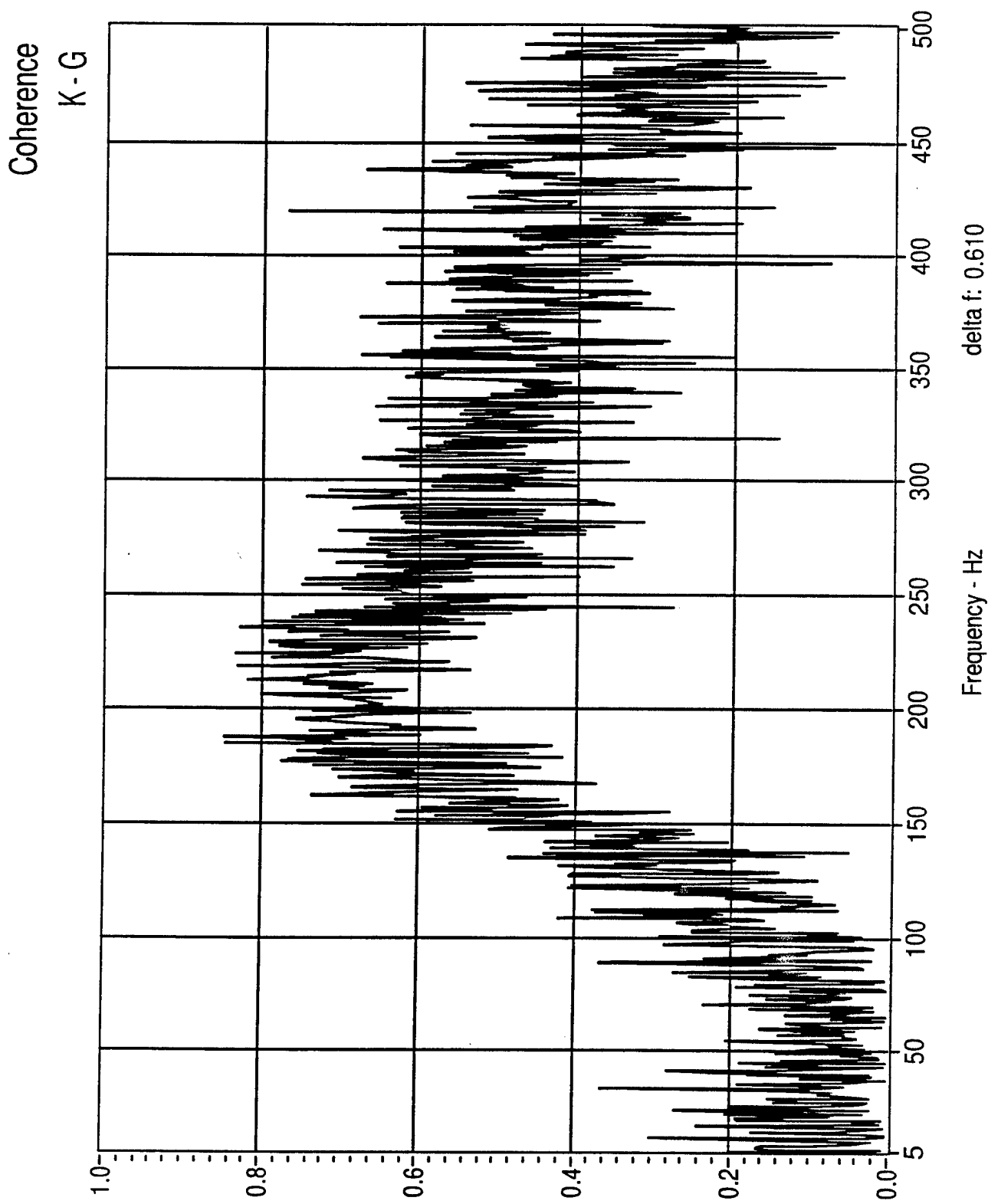
F-15 TPN\_2844: alpha=8 beta=0 bp=0



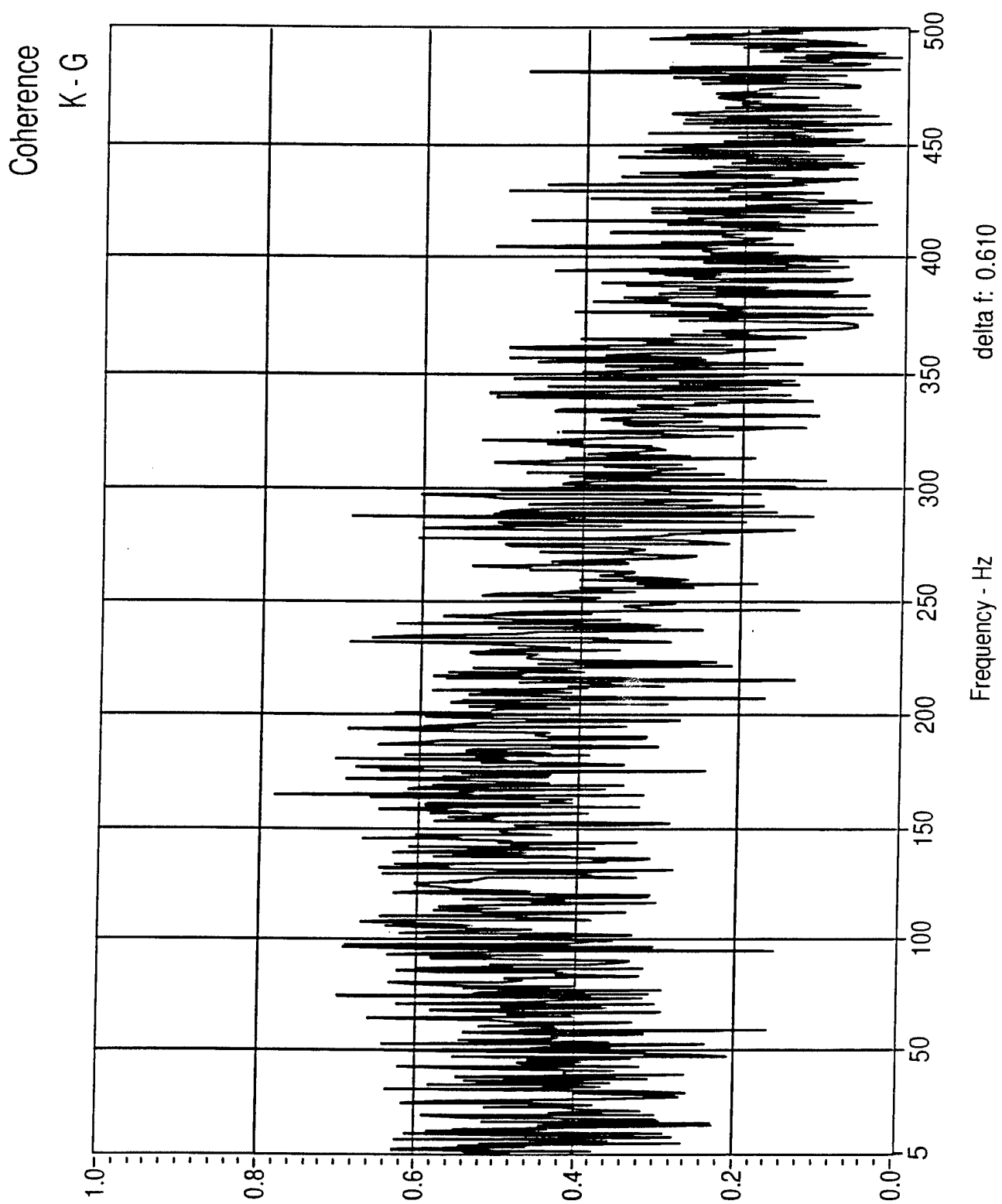
F-15 TPN\_2850: alpha=20 beta=0 bp=0



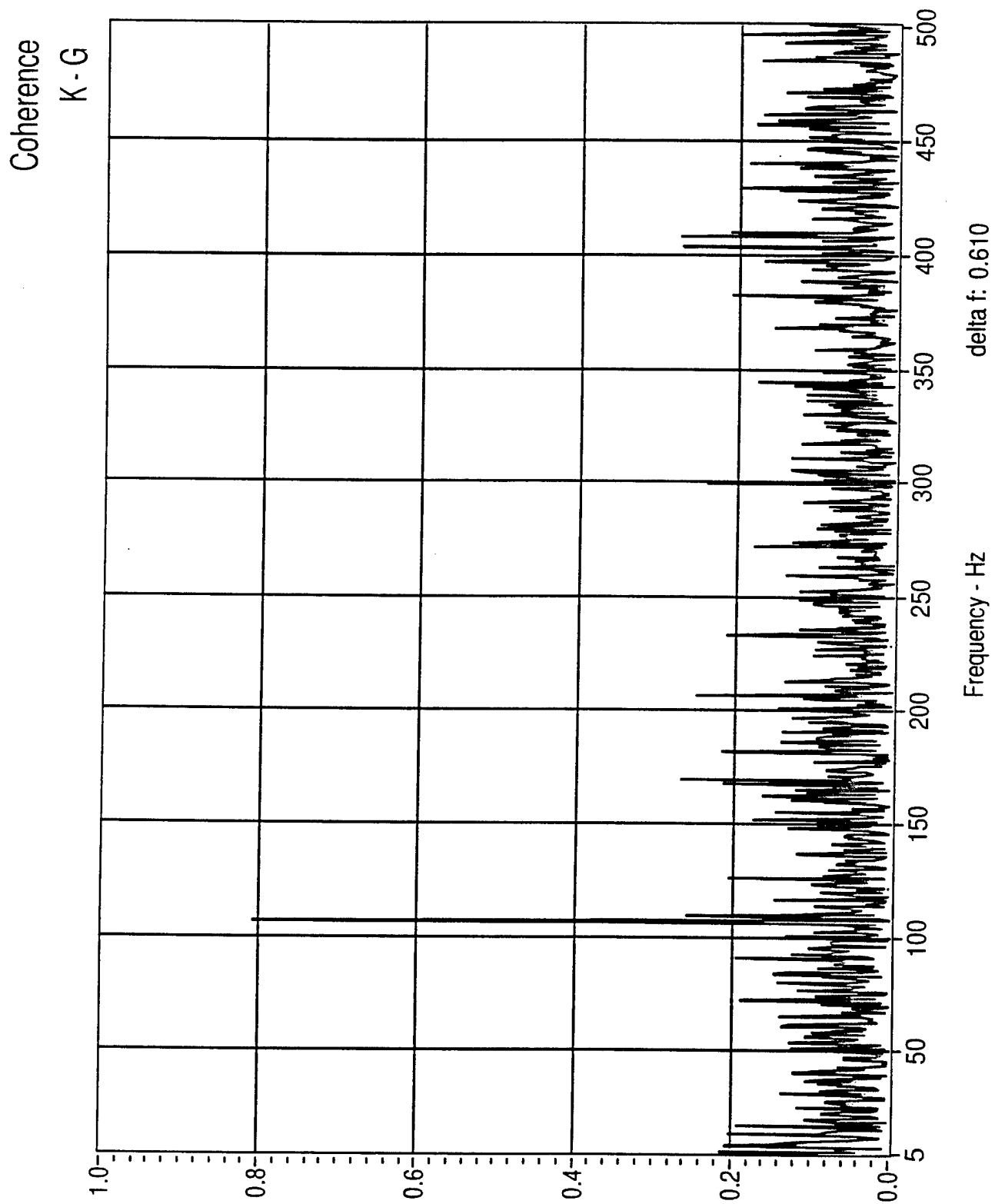
F-15 TPN\_2852: alpha=24 beta=0 bp=0



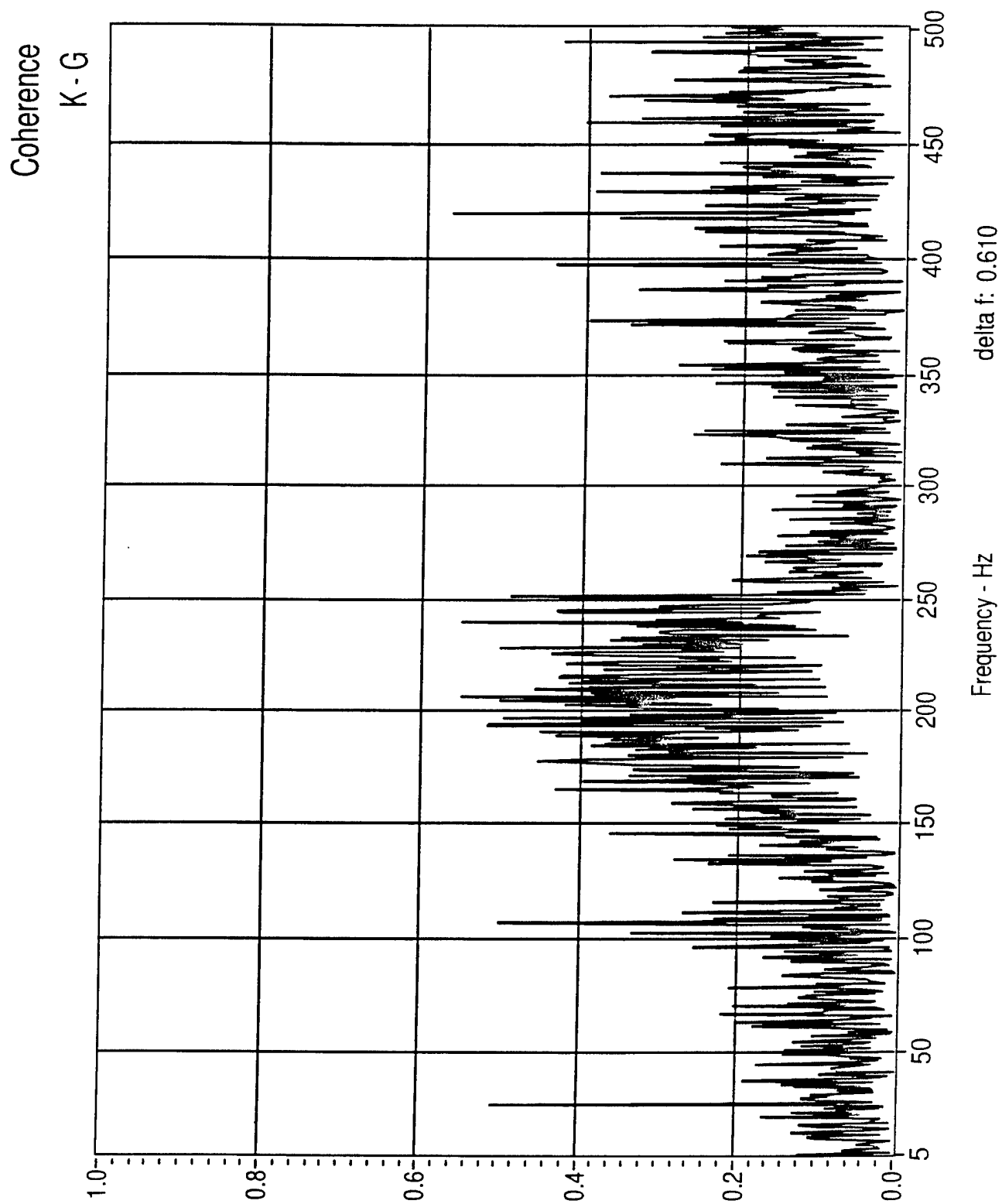
F-15 TPN\_2854:alpha=32 beta=0 bp=0



F-15 TPN\_2864:  $\alpha=8$   $\beta=-4$   $\text{bp}=0$

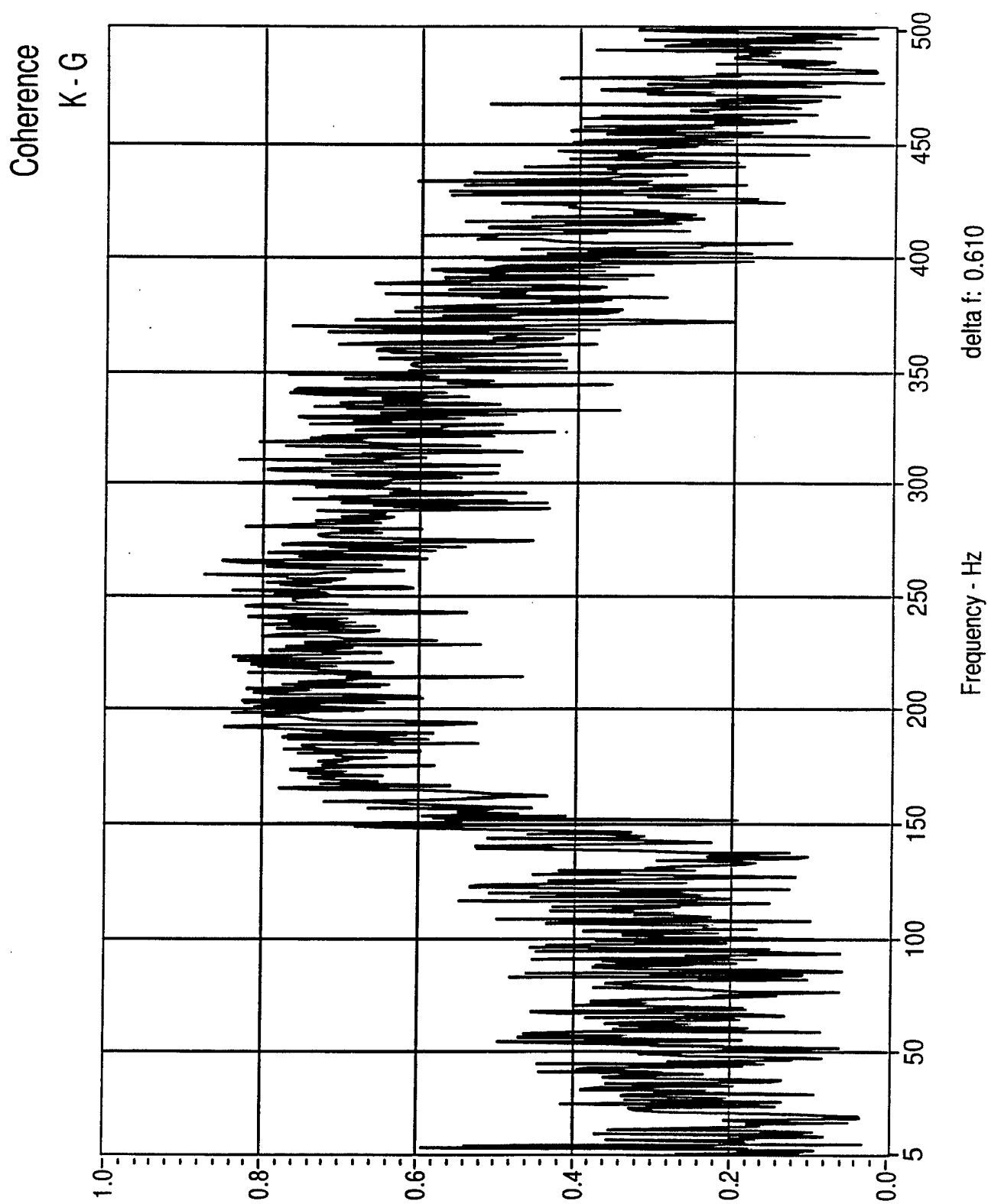


F-15 TPN\_2870: alpha=20 beta=-4 bp=0

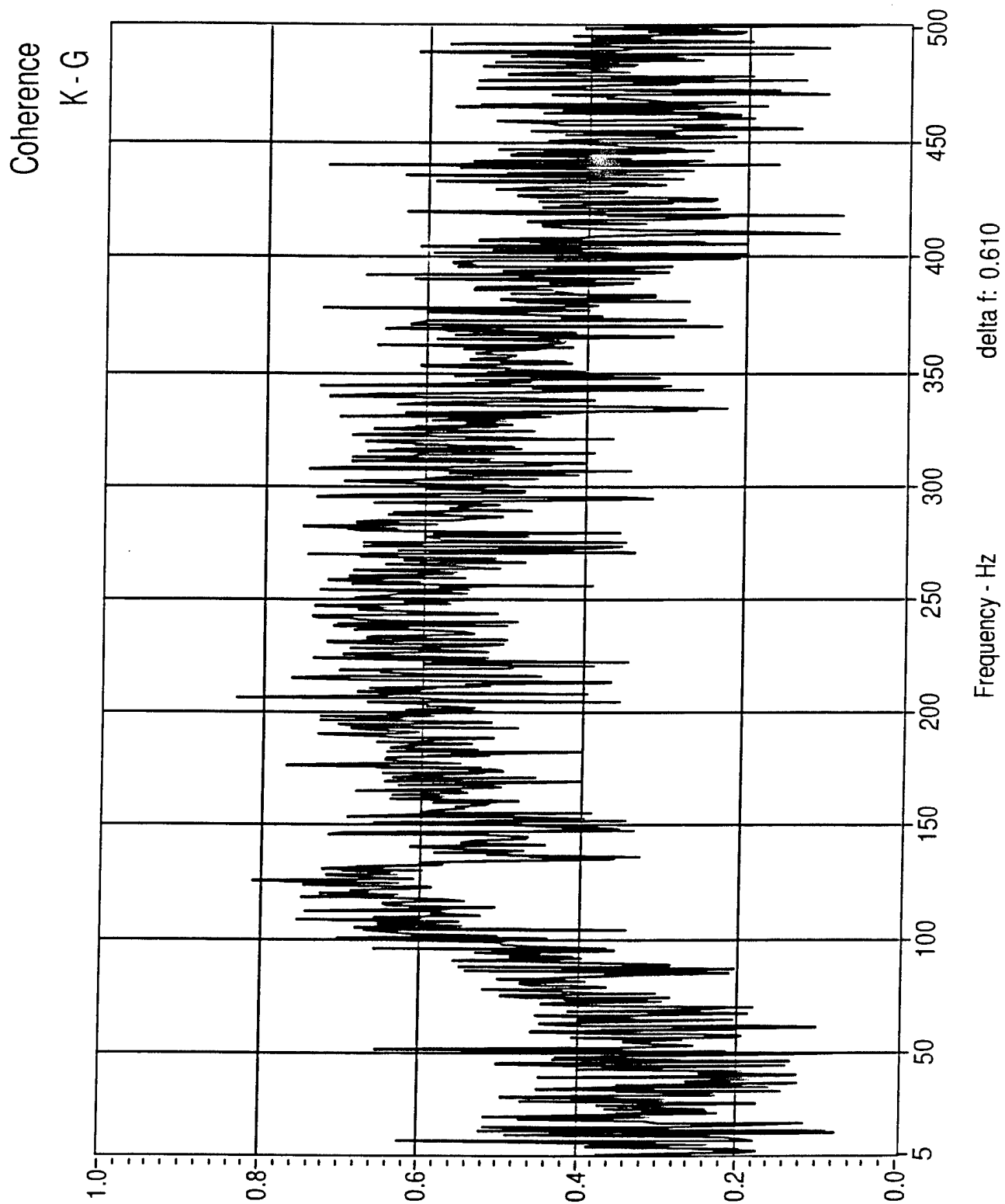




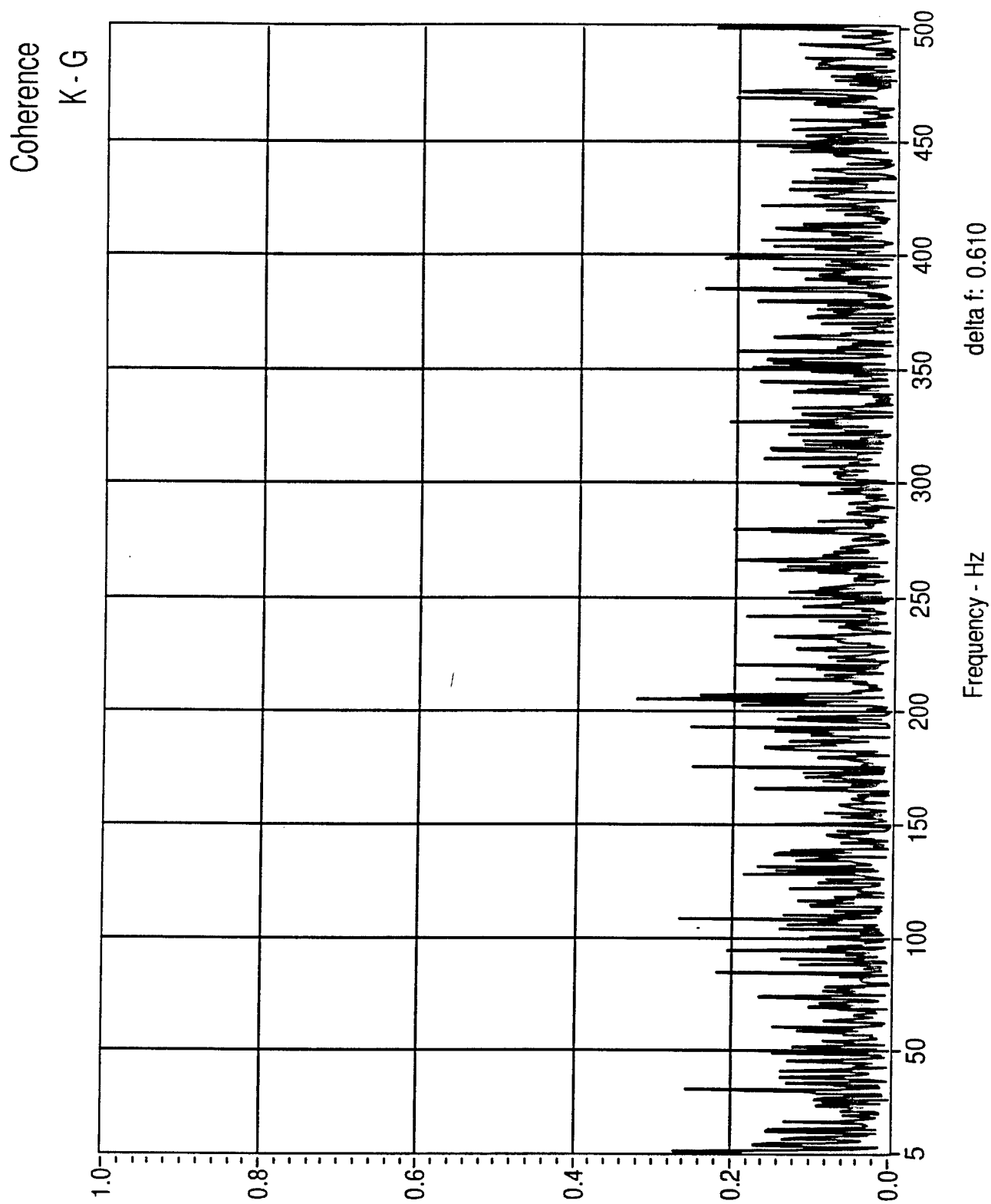
F-15 TPN\_2872:  $\alpha=24$   $\beta=-4$   $\text{bp}=0$



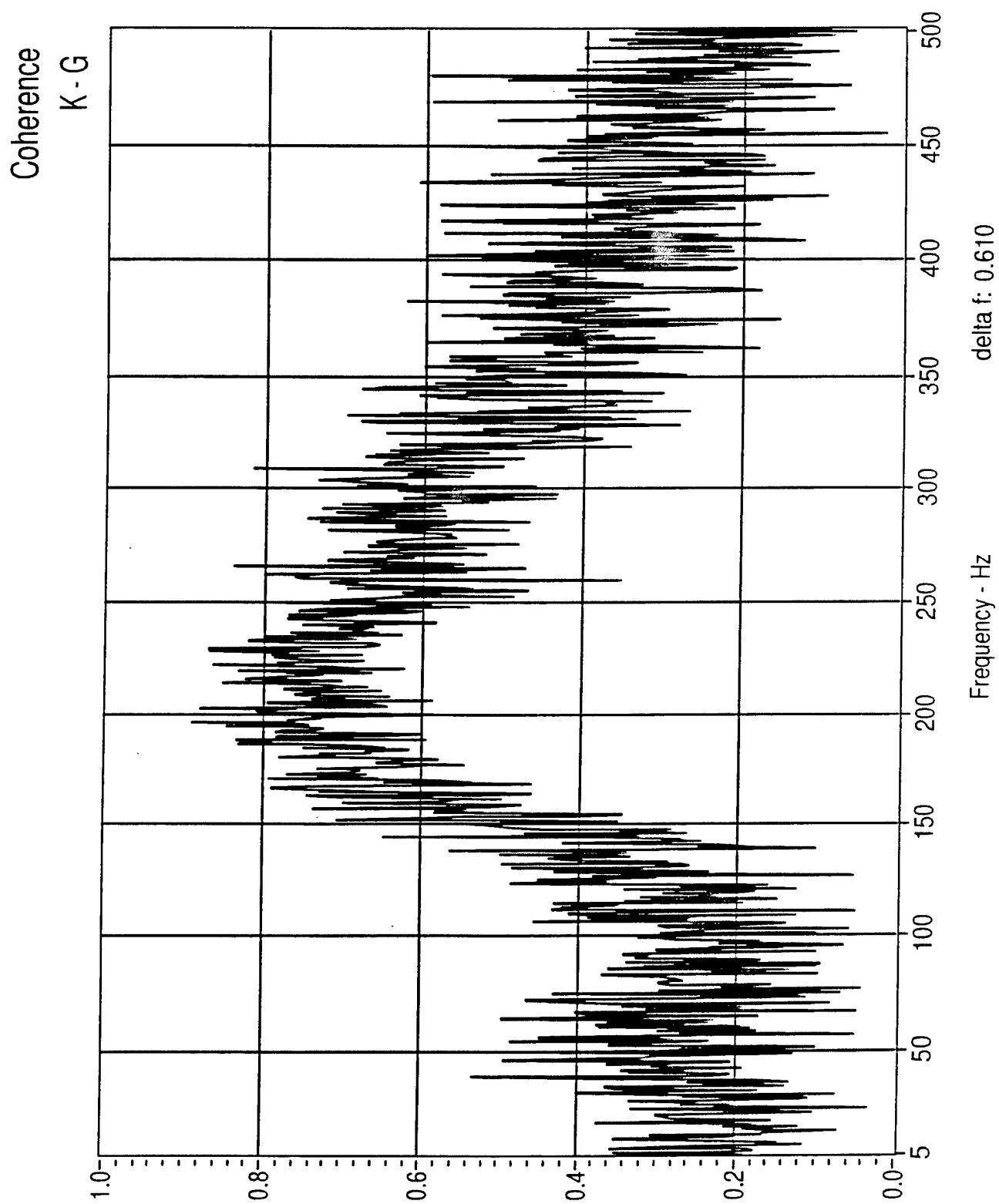
F-15 TPN\_2874: alpha=32 beta=-4 bp=0



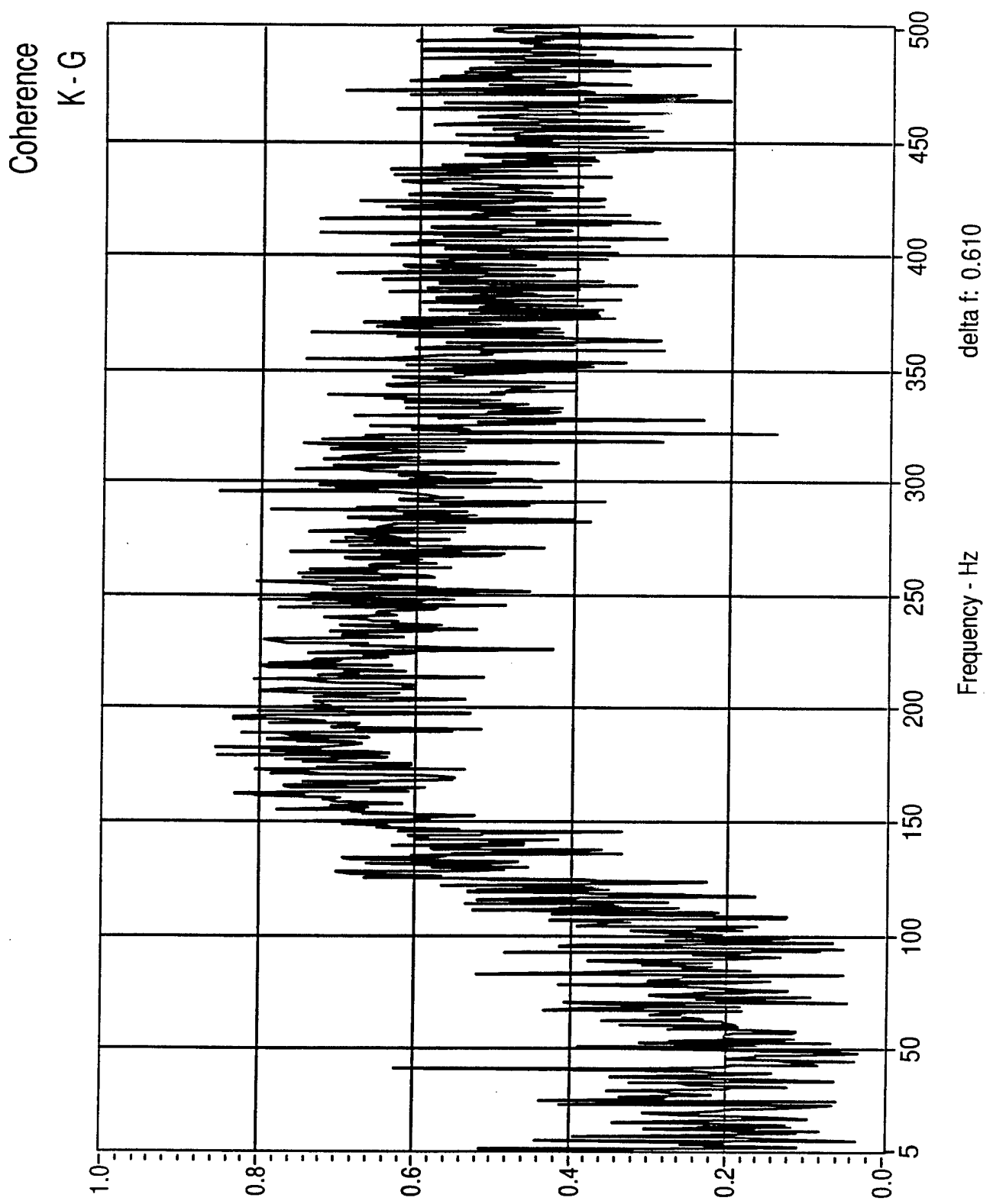
F-15 TPN\_3351: alpha=8 beta=4 bp=45

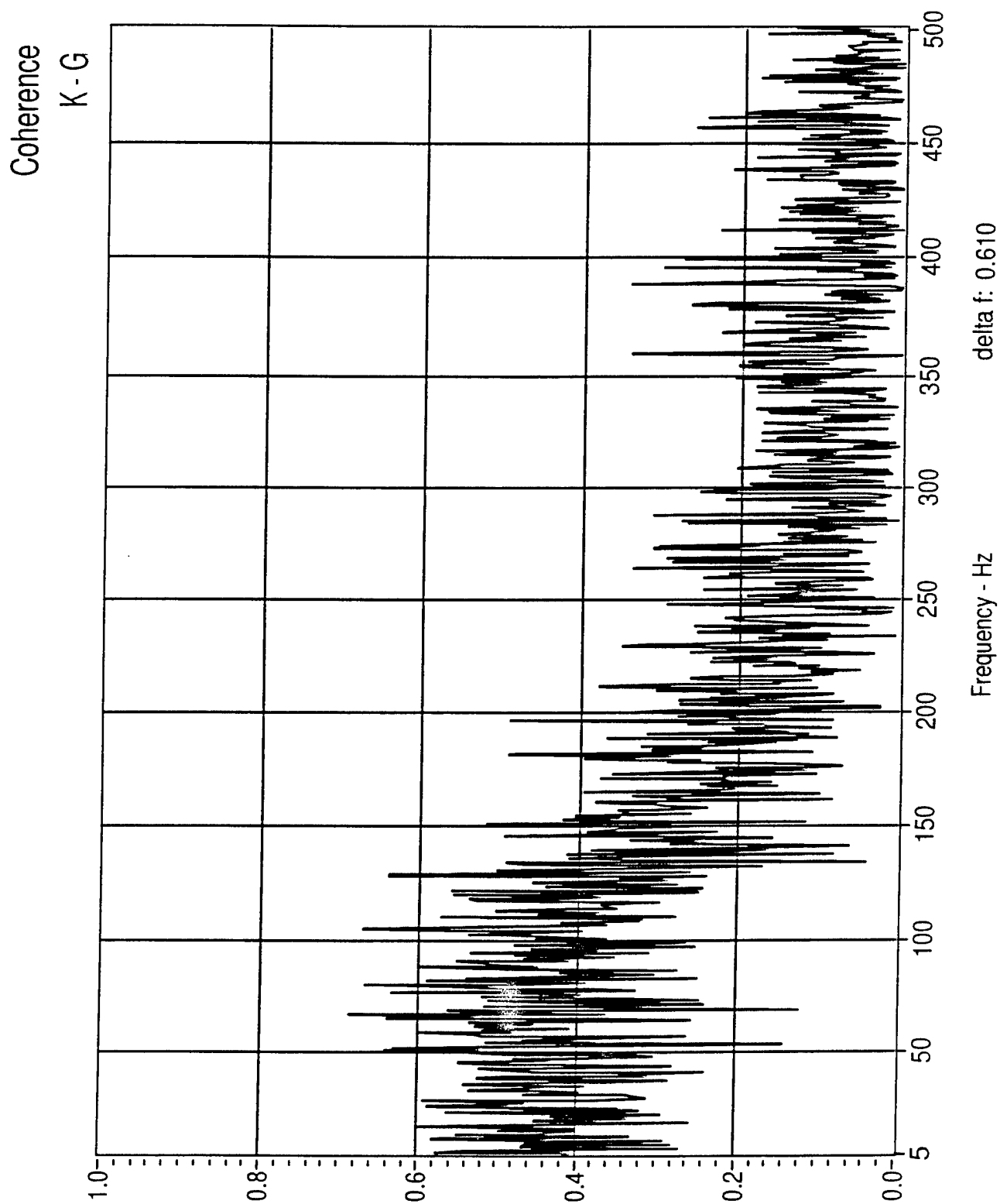


F-15 TPN\_3357: alpha=20 beta=4 bp=45

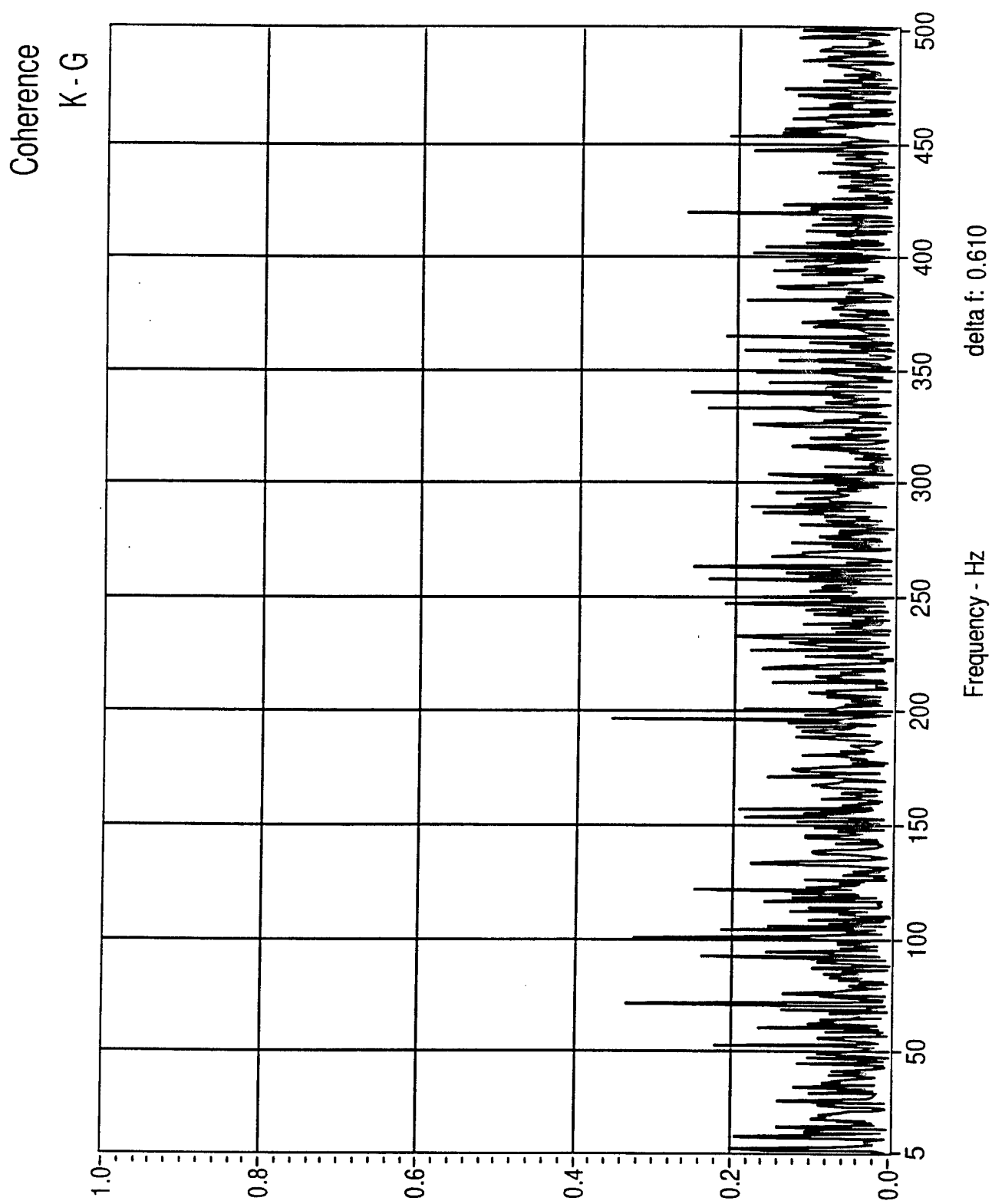


F-15 TPN\_3359: alpha=24 beta=4 bp=45

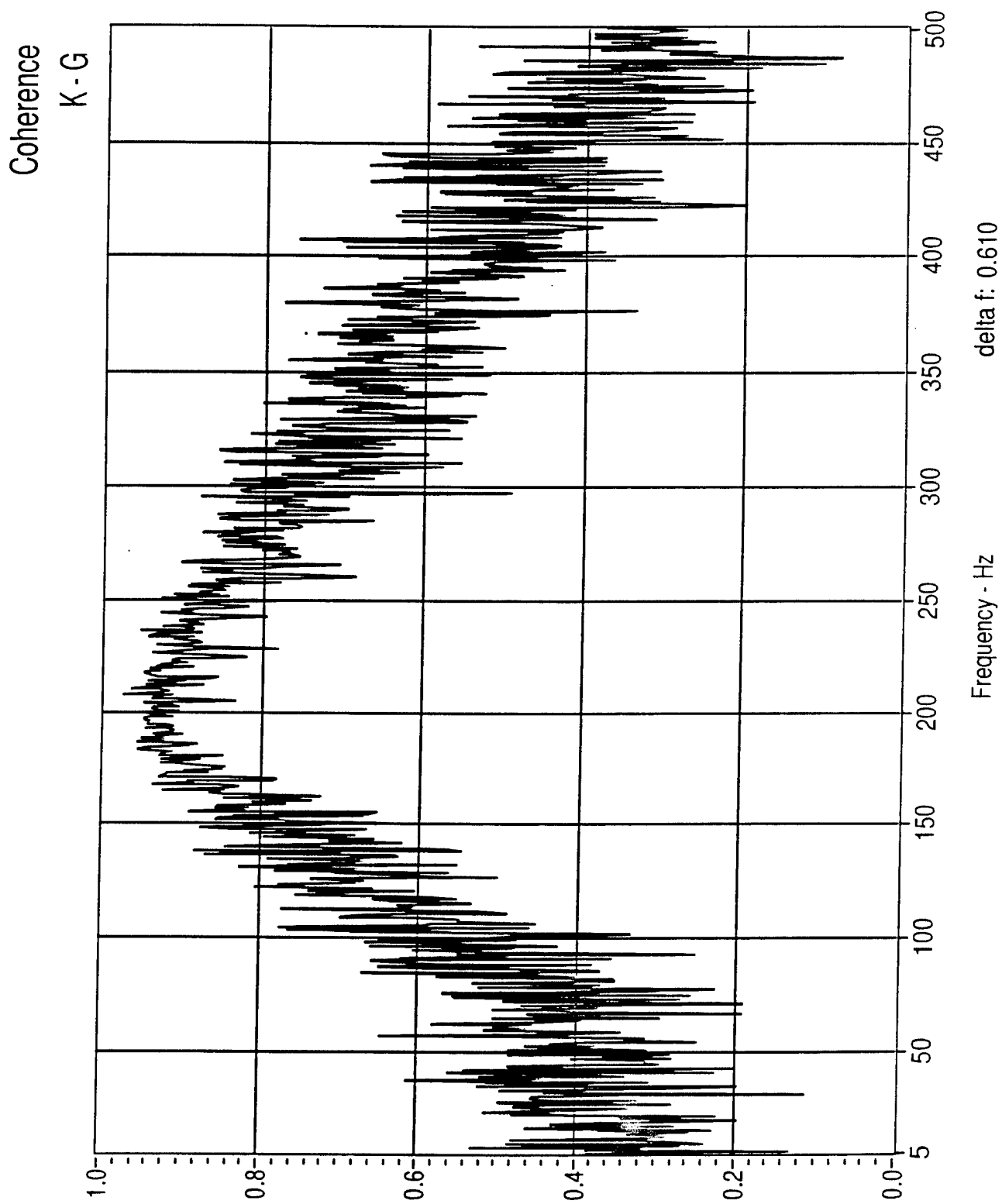




F-15 TPN\_3333: alpha=8 beta=0 bp=45

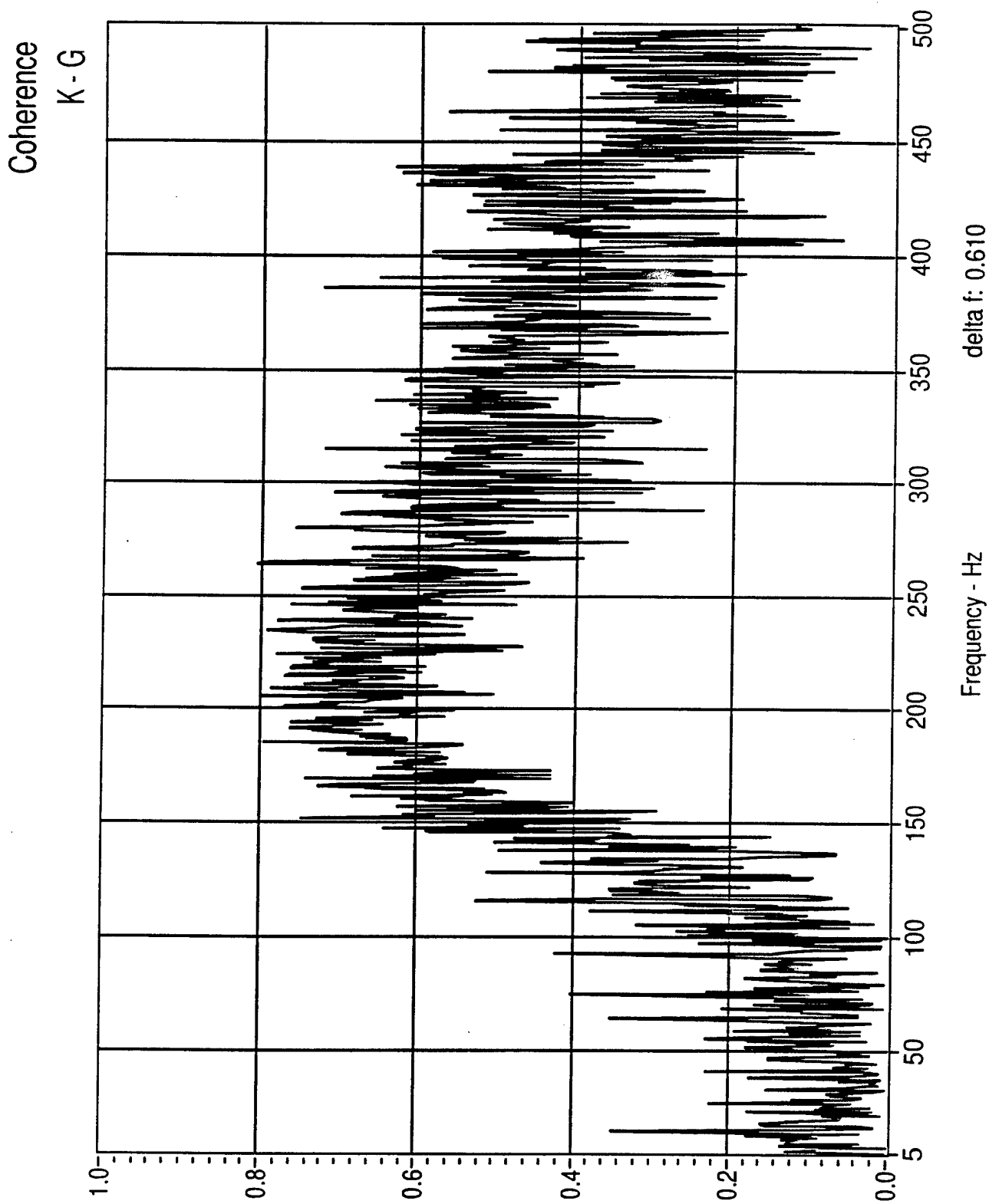


F-15 TPN\_3339: alpha=20 beta=0 bp=45

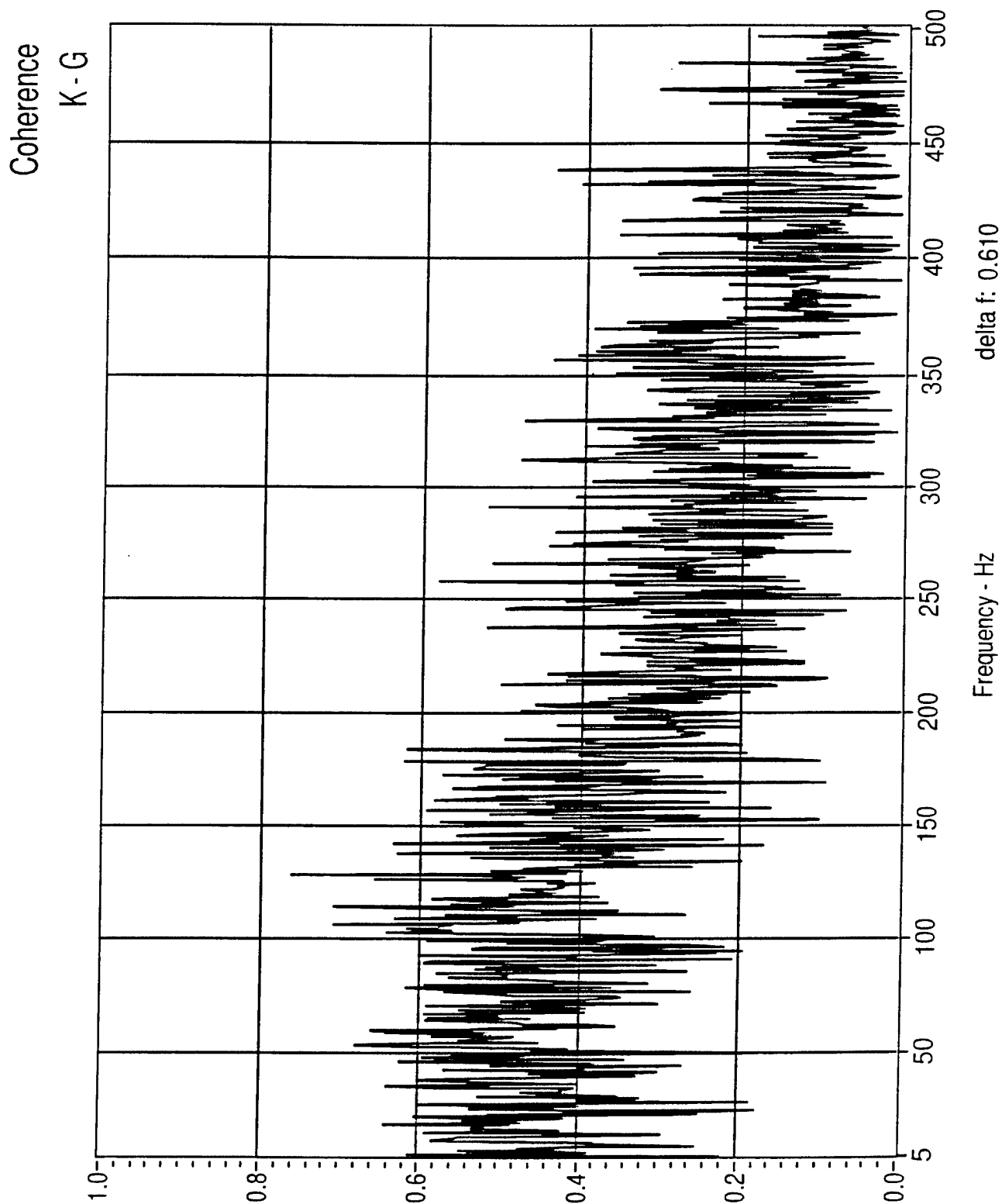




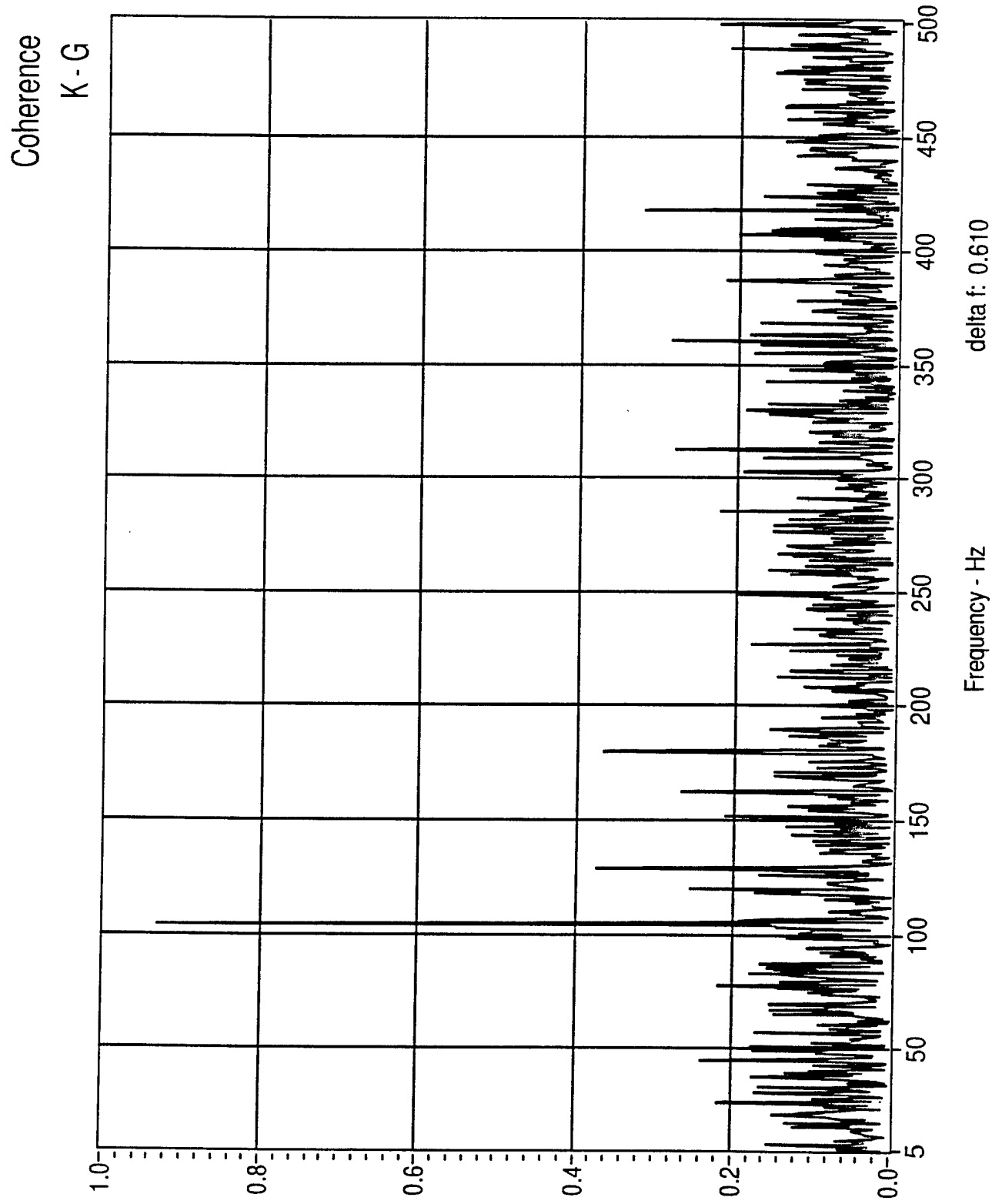
F-15 TPN\_3341: alpha=24 beta=0 bp=45



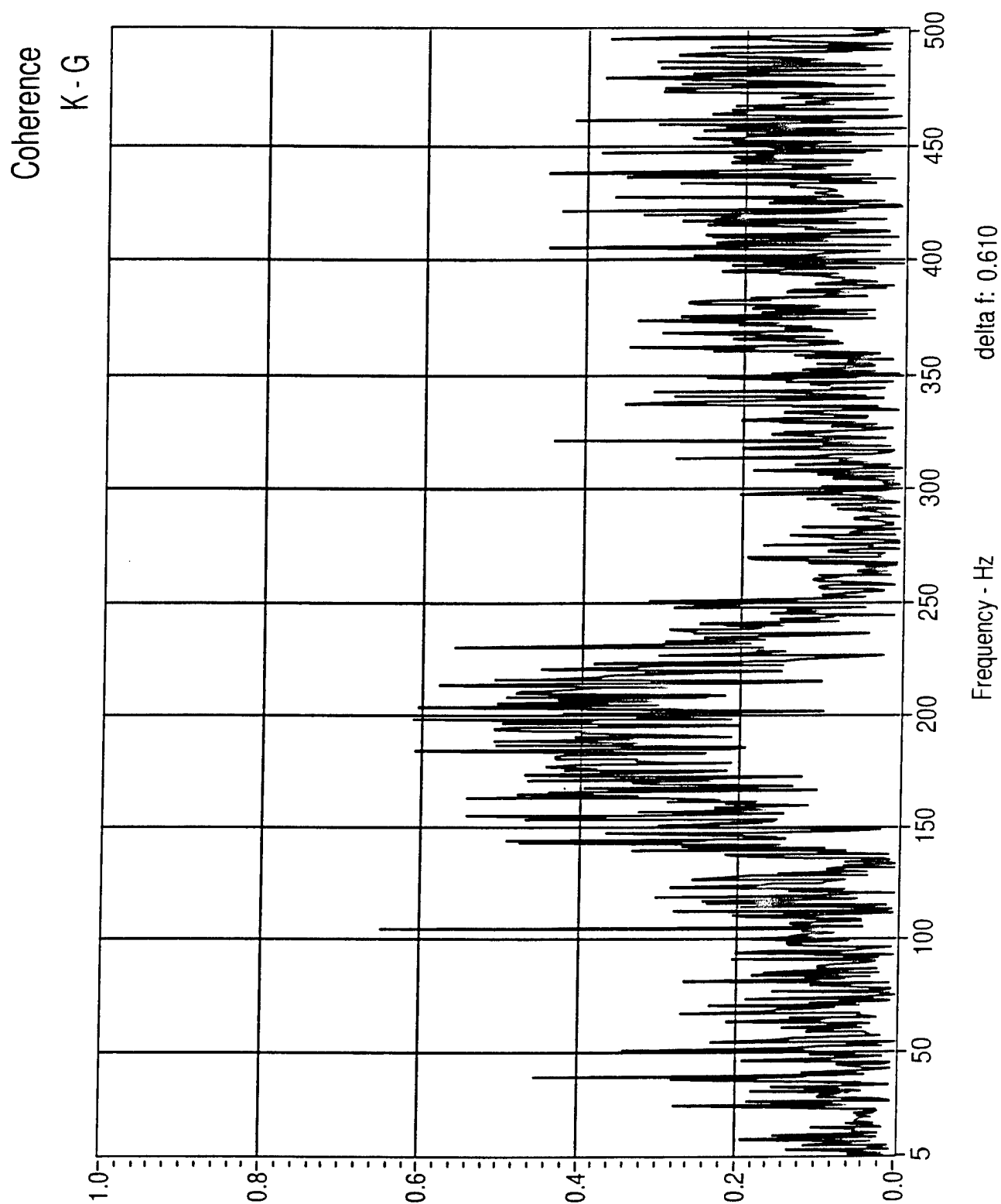
F-15 TPN\_3343: alpha=32 beta=0 bp=45



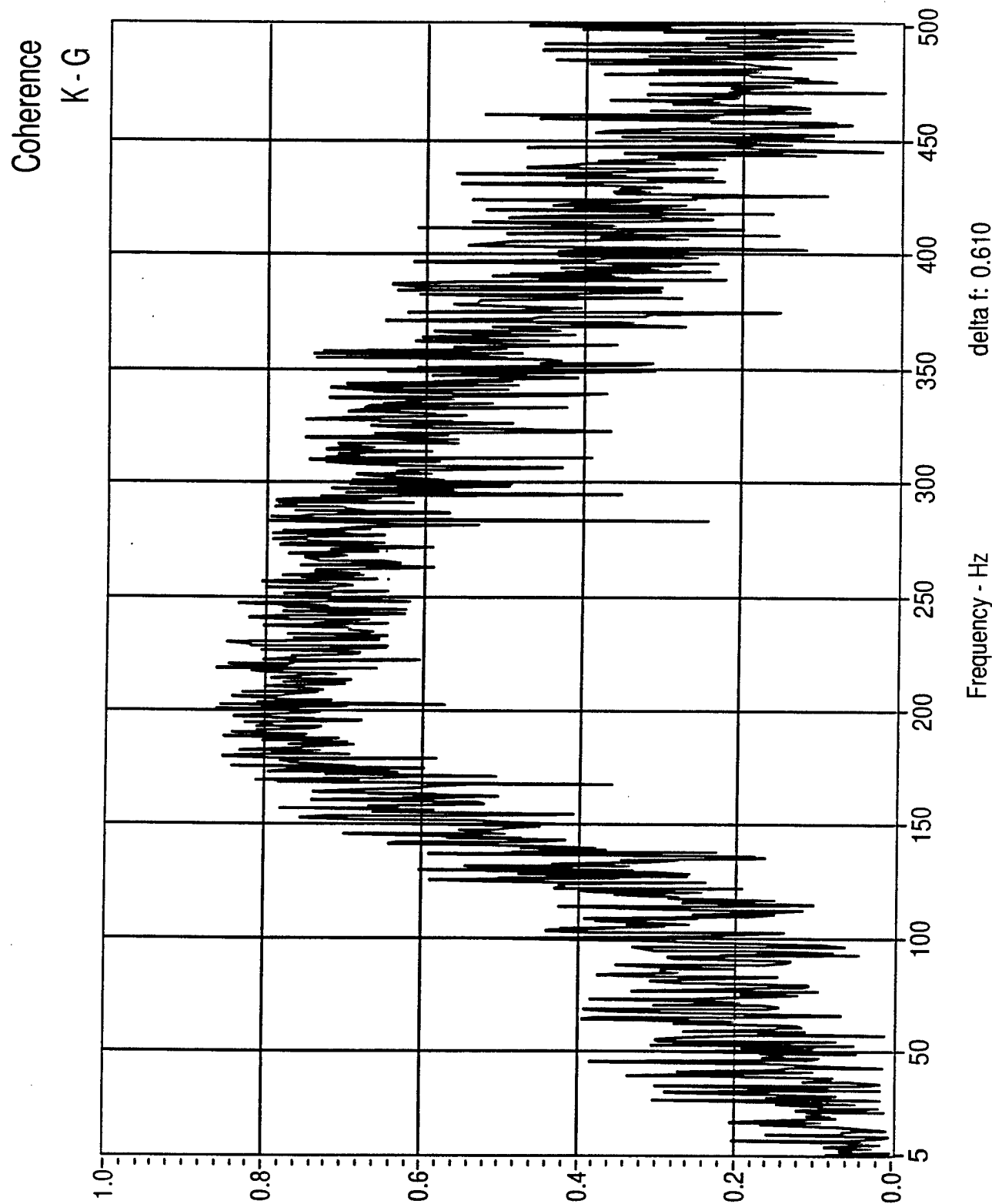
F-15 TPN\_3369: alpha=8 beta=-4 bp=45



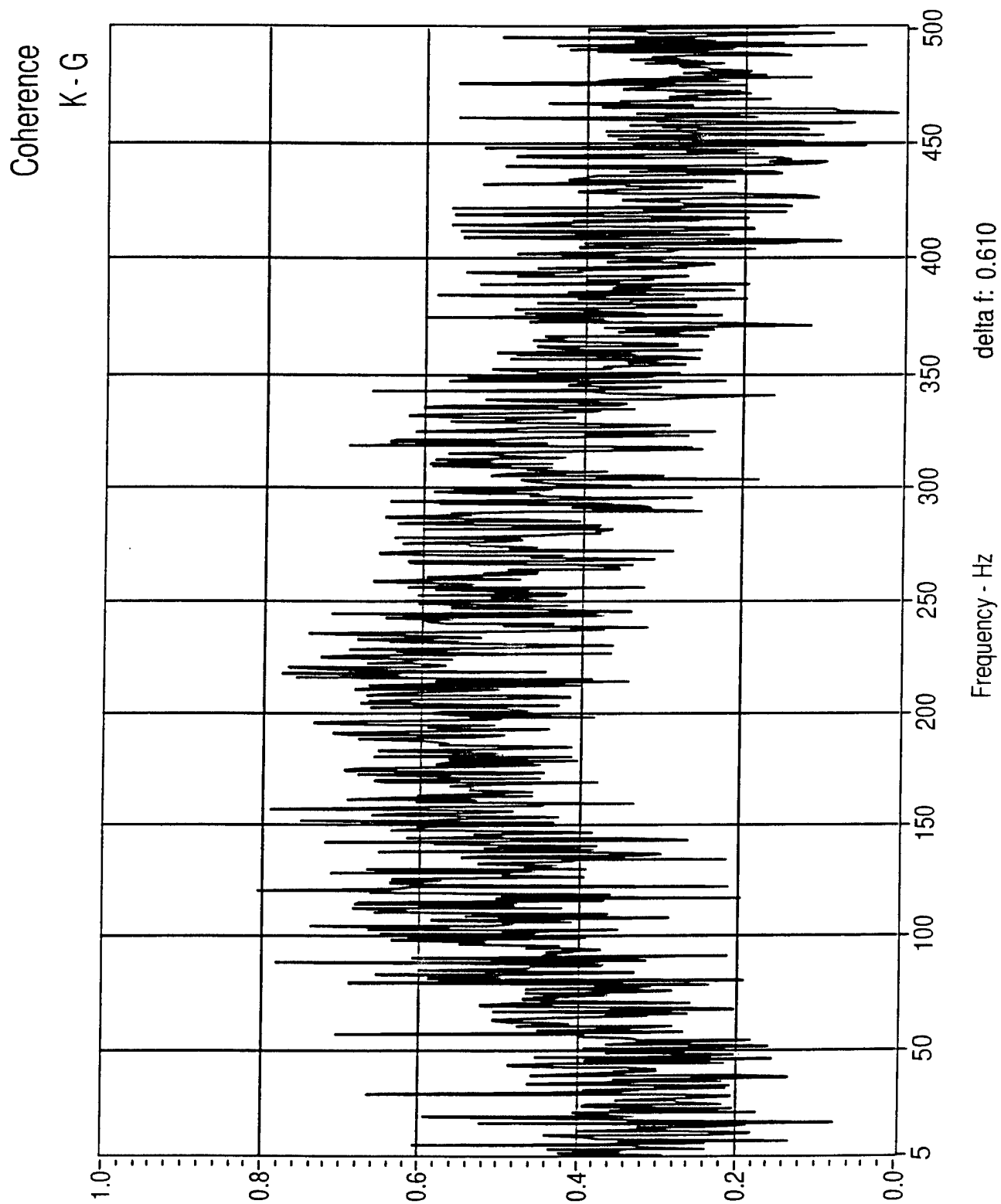
F-15 TPN\_3375: alpha=20 beta=-4 bp=4



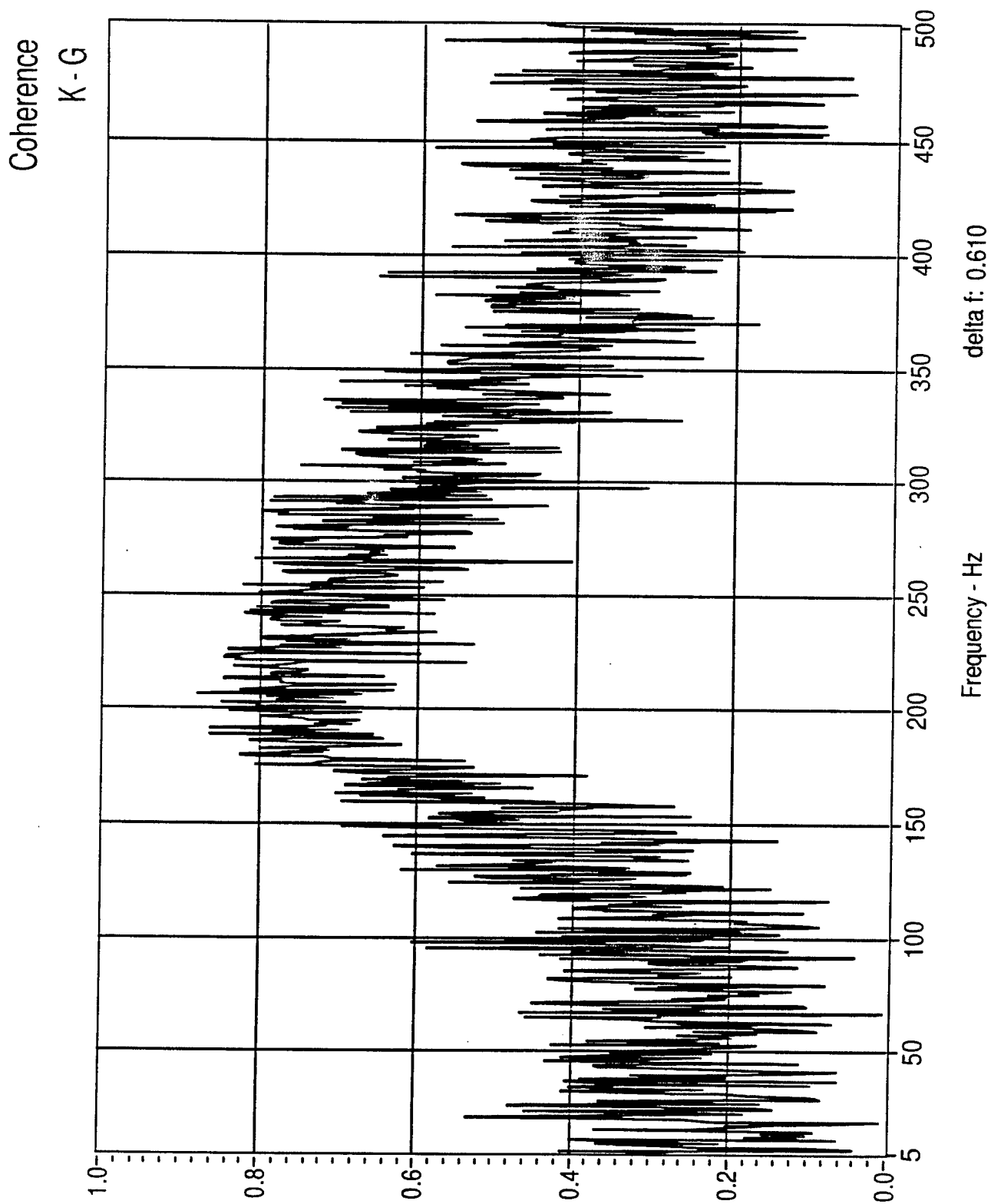
F-15 TPN\_3377: alpha=24 beta=-4 bp=45



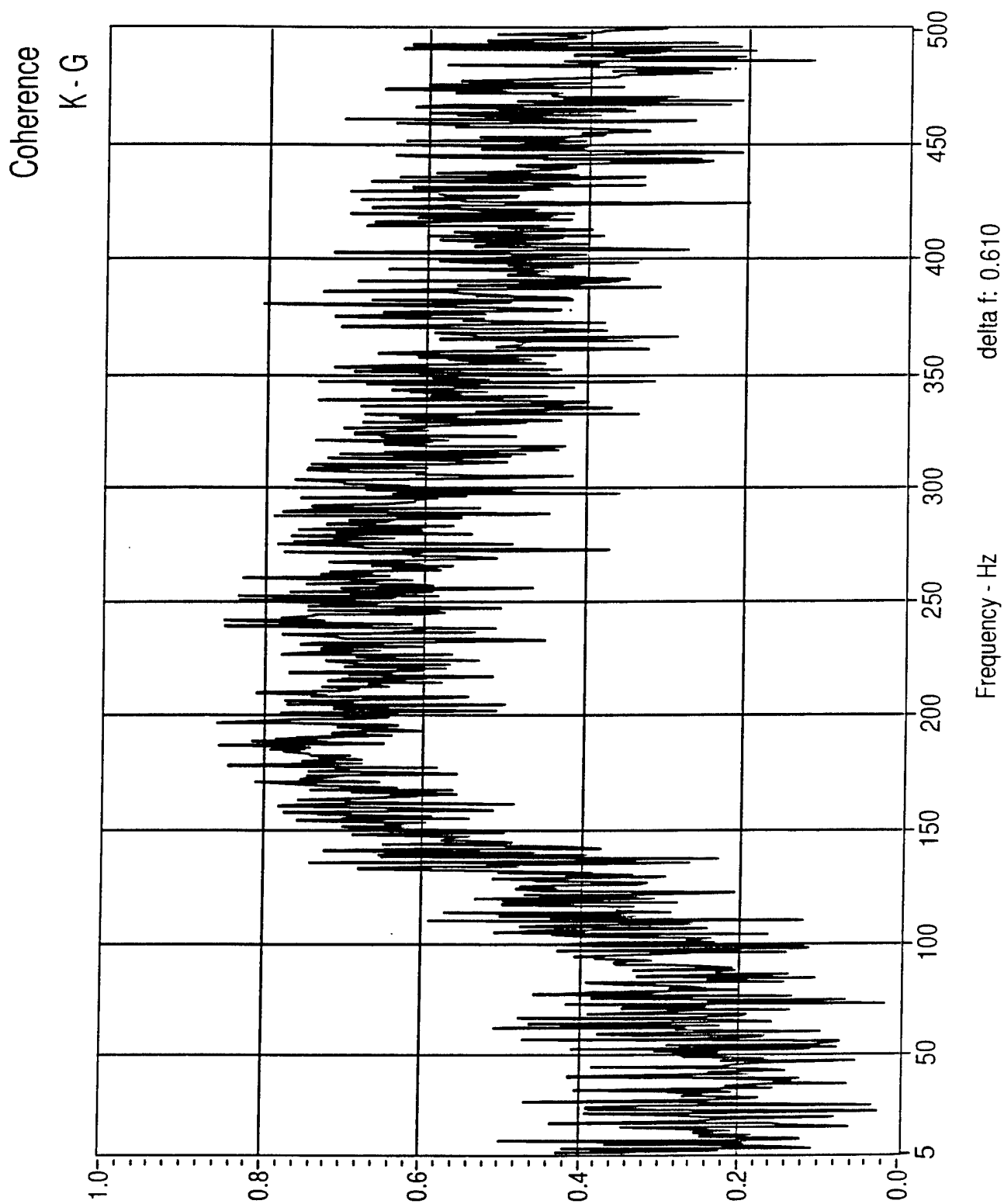
F-15 TPN\_3379: alpha=32 beta=-4 bp=4



F-15 TPN\_3046: alpha=20 beta=4 bp=65

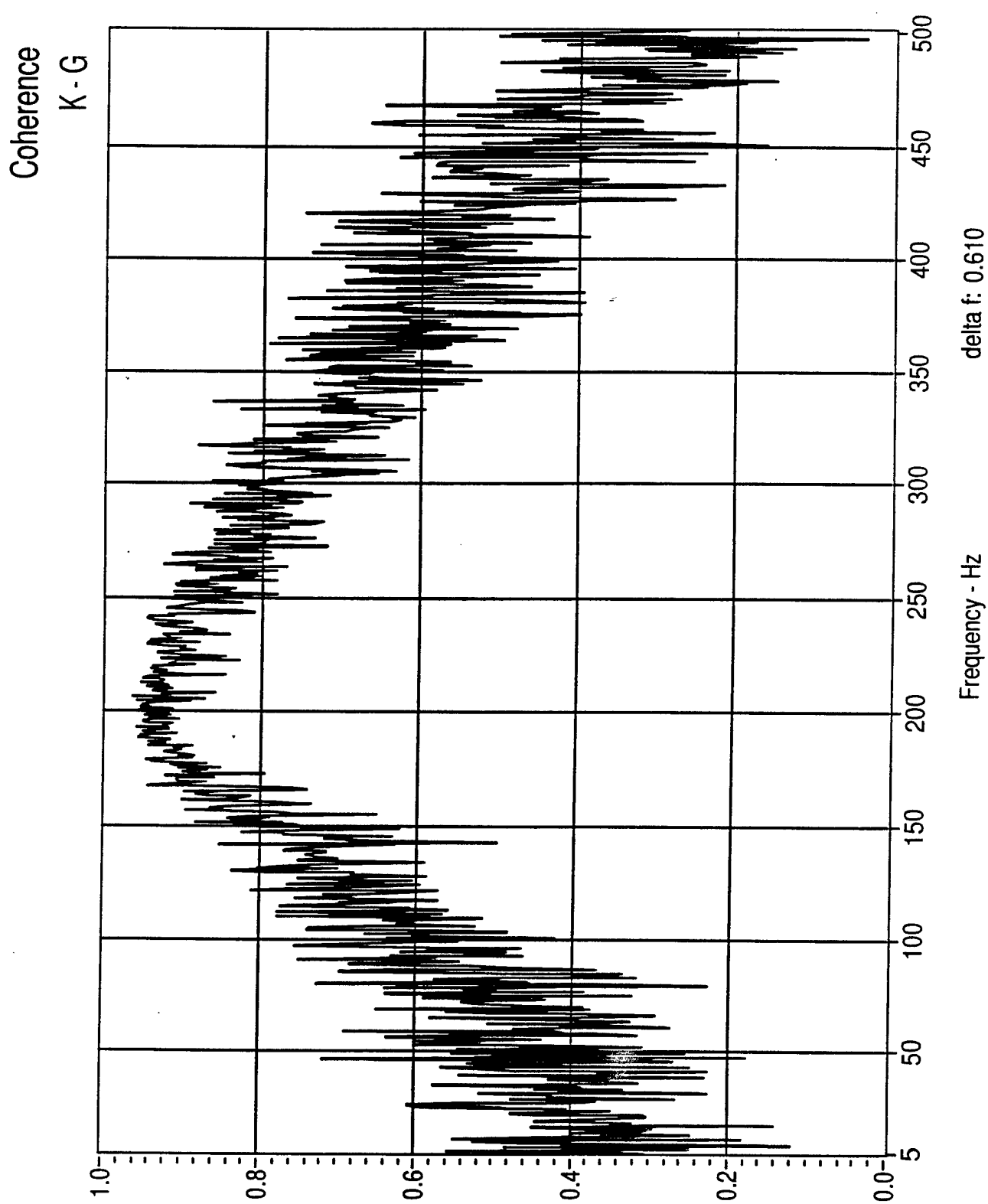


F-15 TPN\_3048: alpha=24 beta=4 bp=65

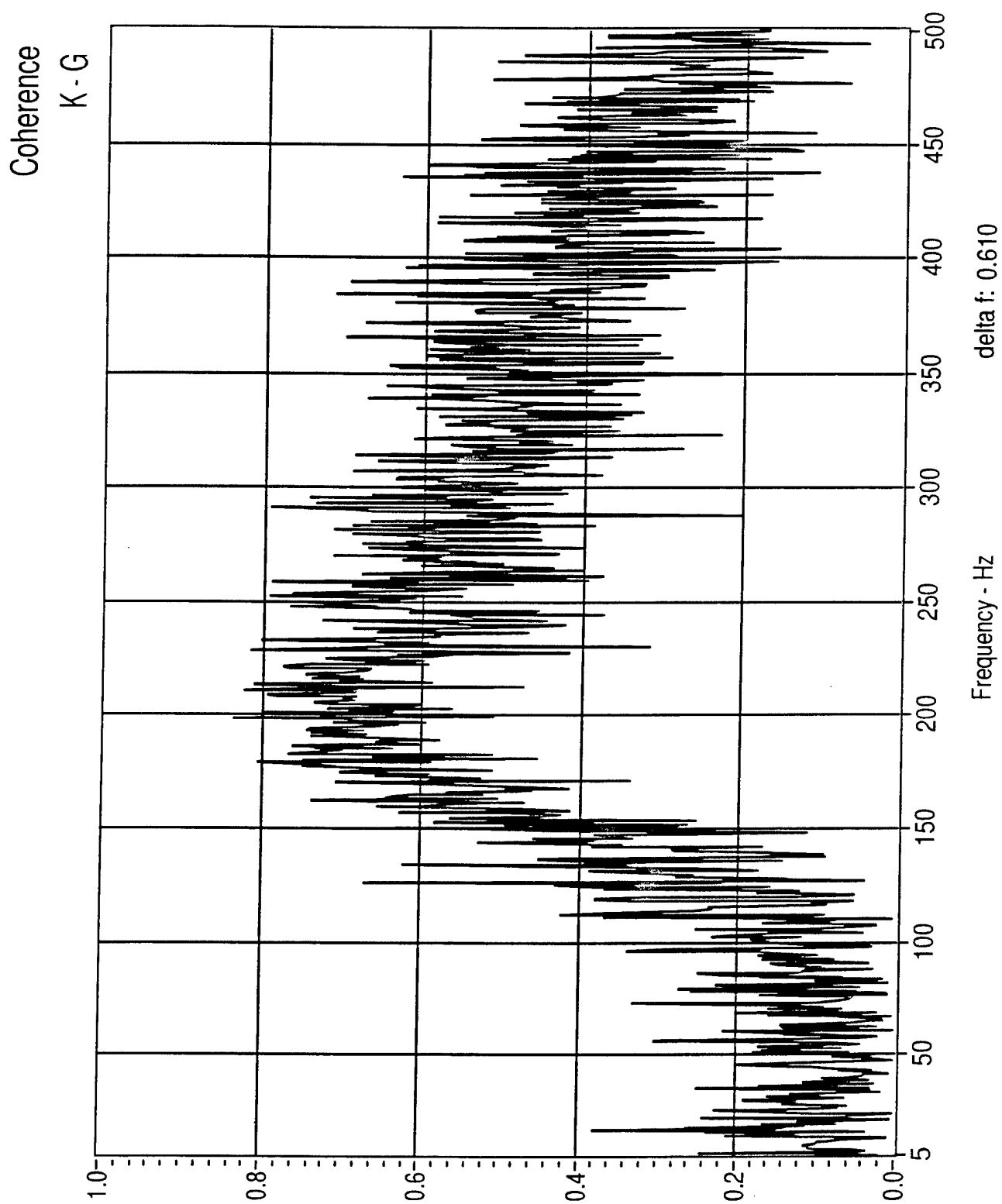




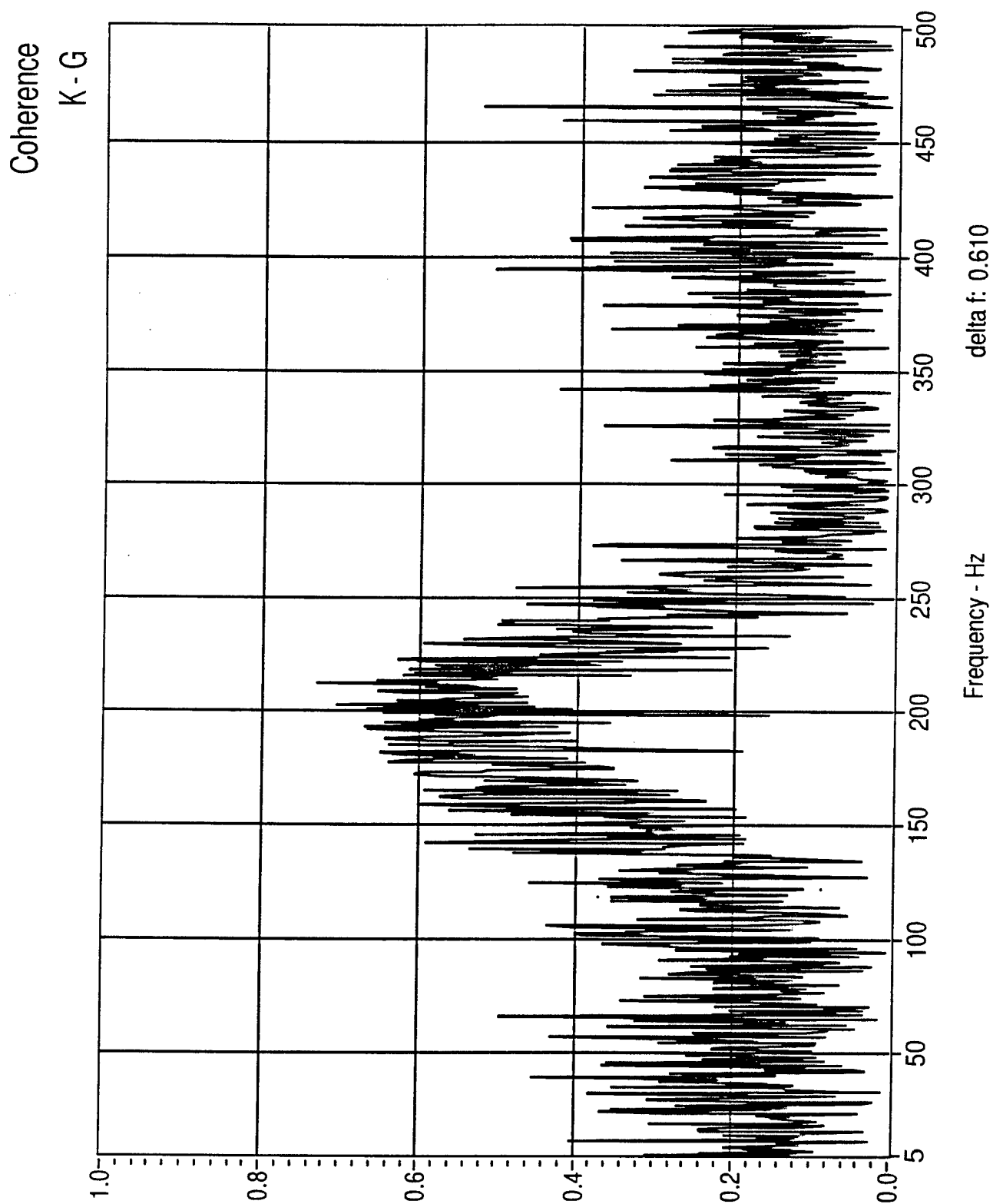
F-15 TPN\_3040: alpha=20 beta=0 bp=65



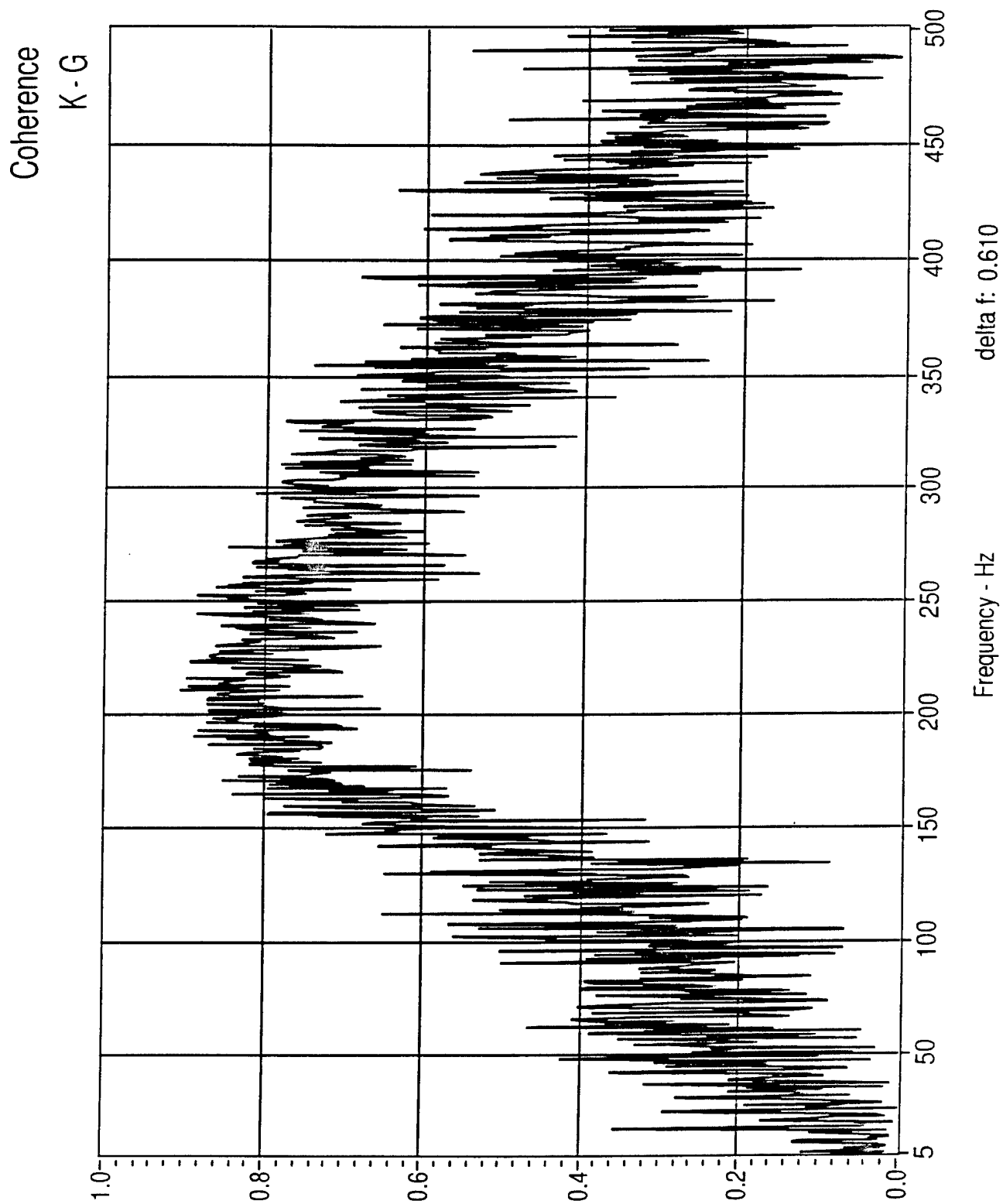
F-15 TPN\_3042: alpha=24 beta=0 bp=65



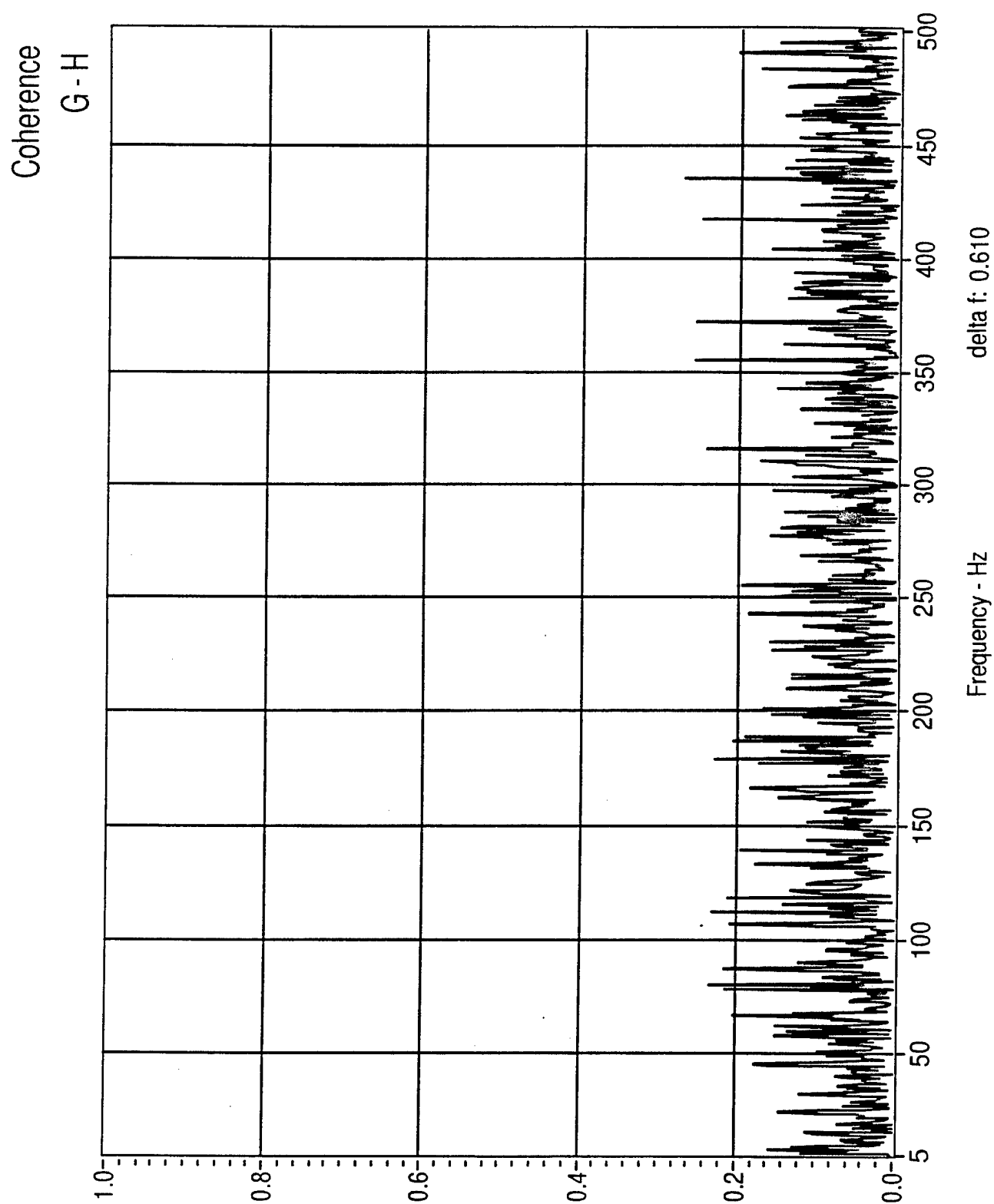
F-15 TPN\_3034: alpha=20 beta=-4 bp=65



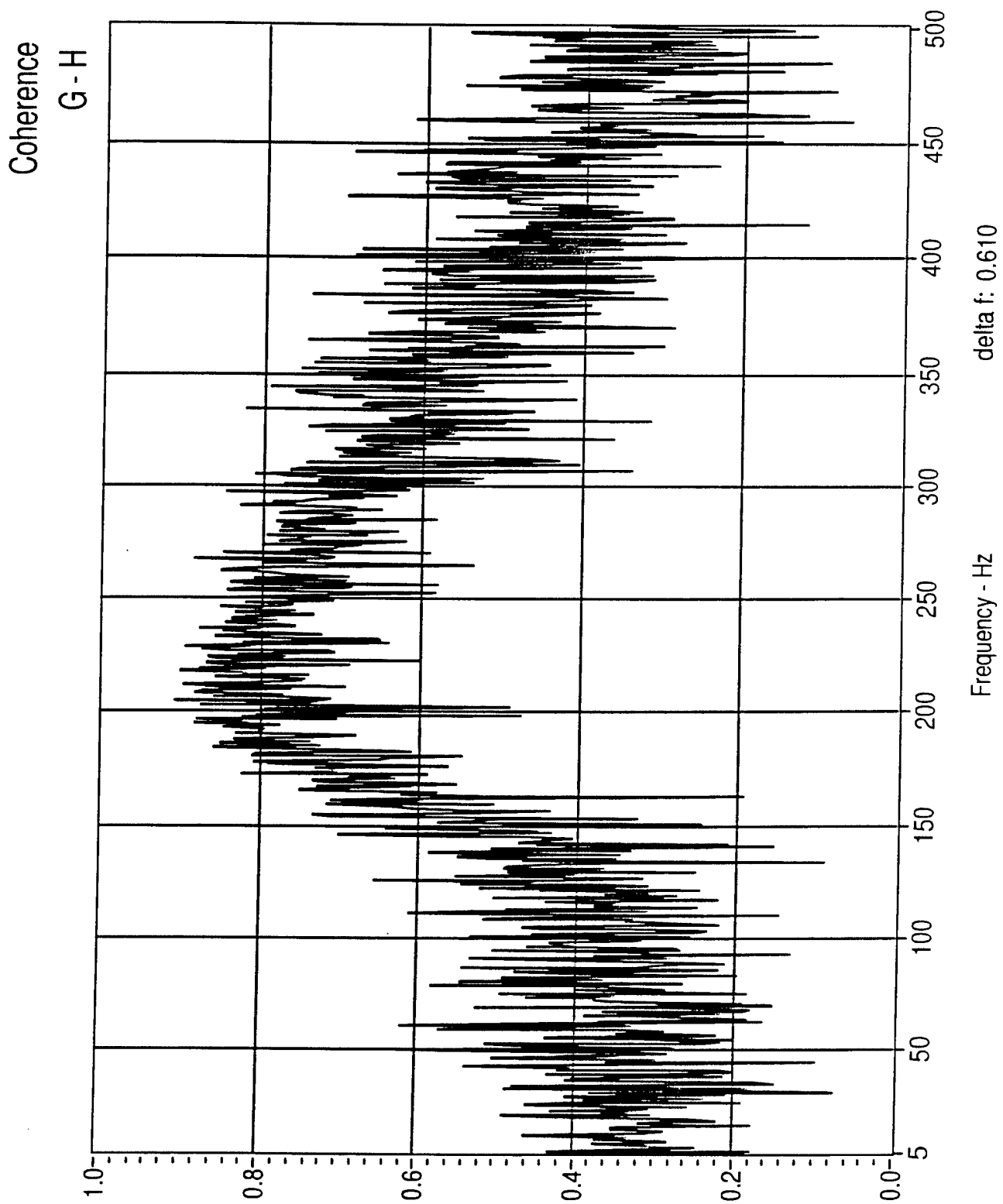
F-15 TPN\_3036: alpha=24 beta=-4 bp=65



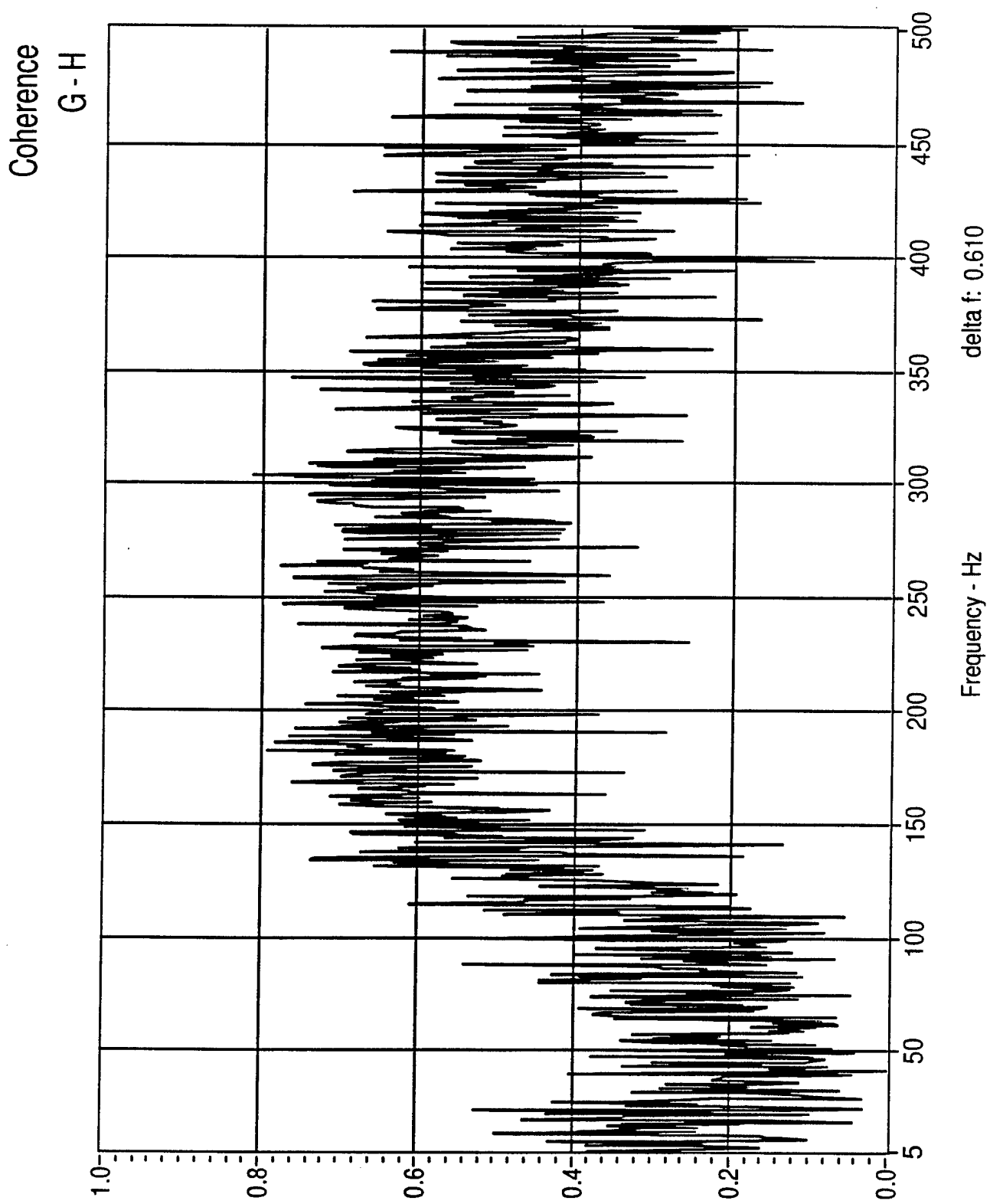
F-15 TPN\_2918: alpha=8 beta=4 bp=0



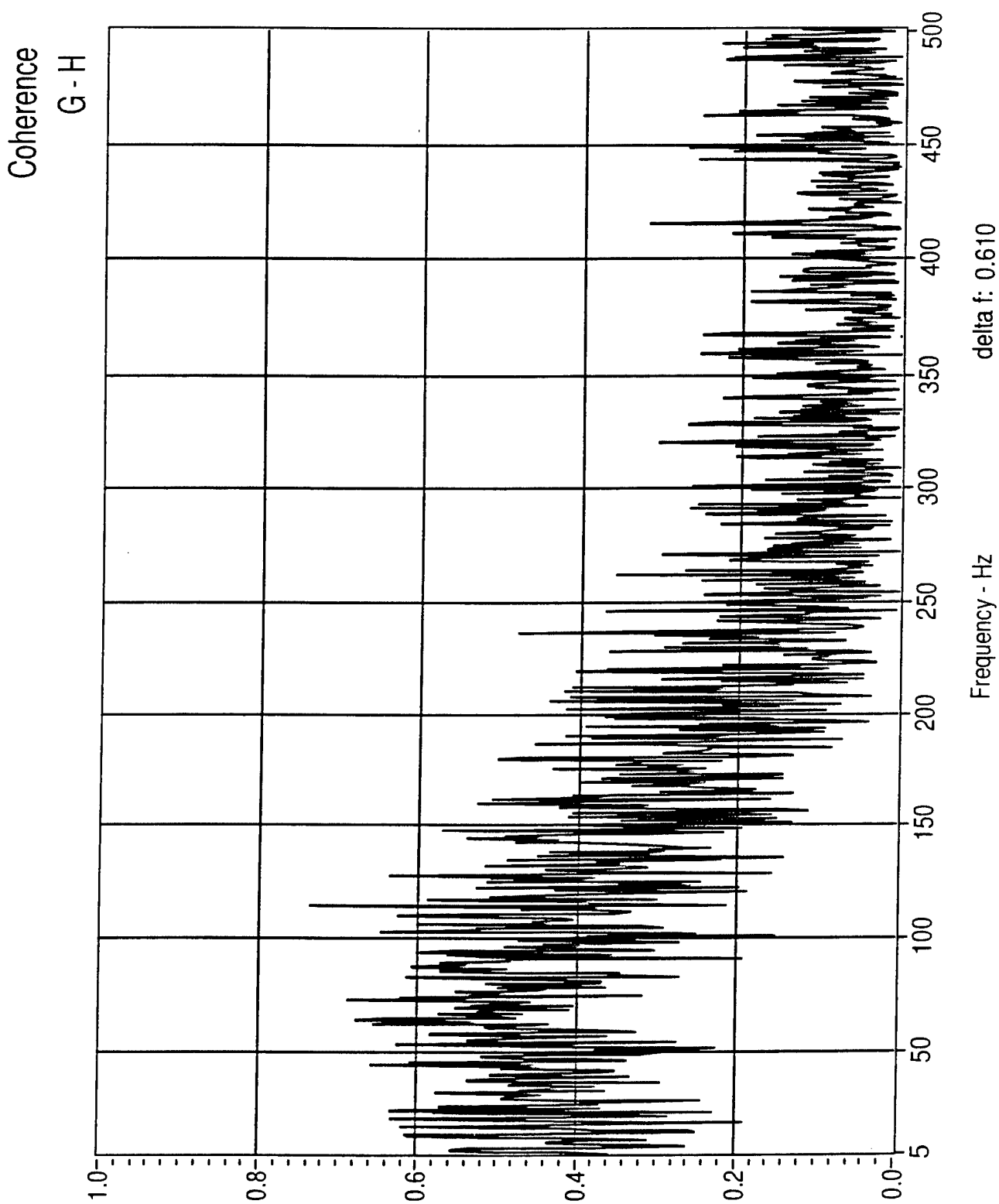
F-15 TPN\_2924: alpha=20 beta=4 bp=0



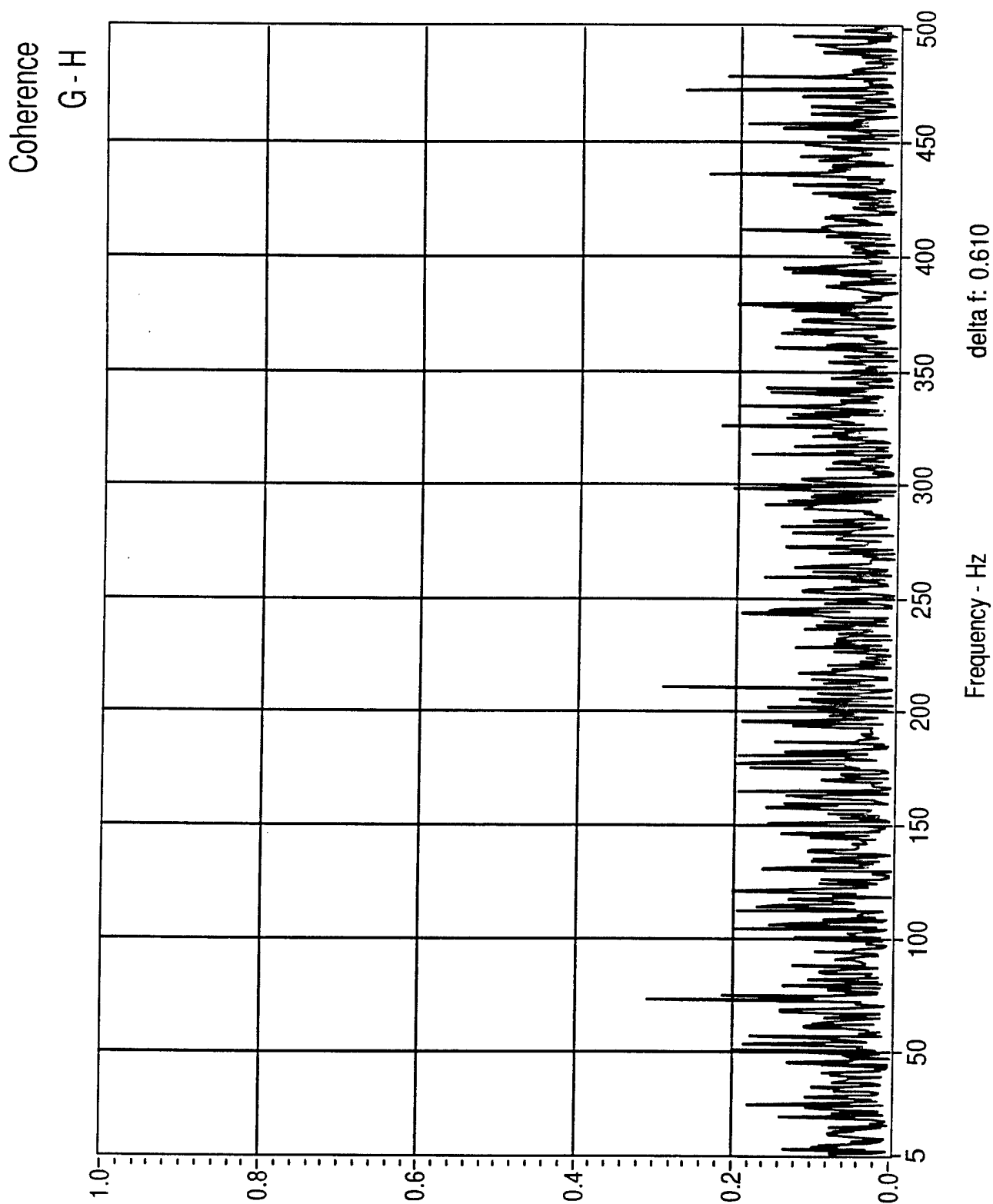
F-15 TPN\_2926:  $\alpha=24$   $\beta=4$   $\text{bp}=0$



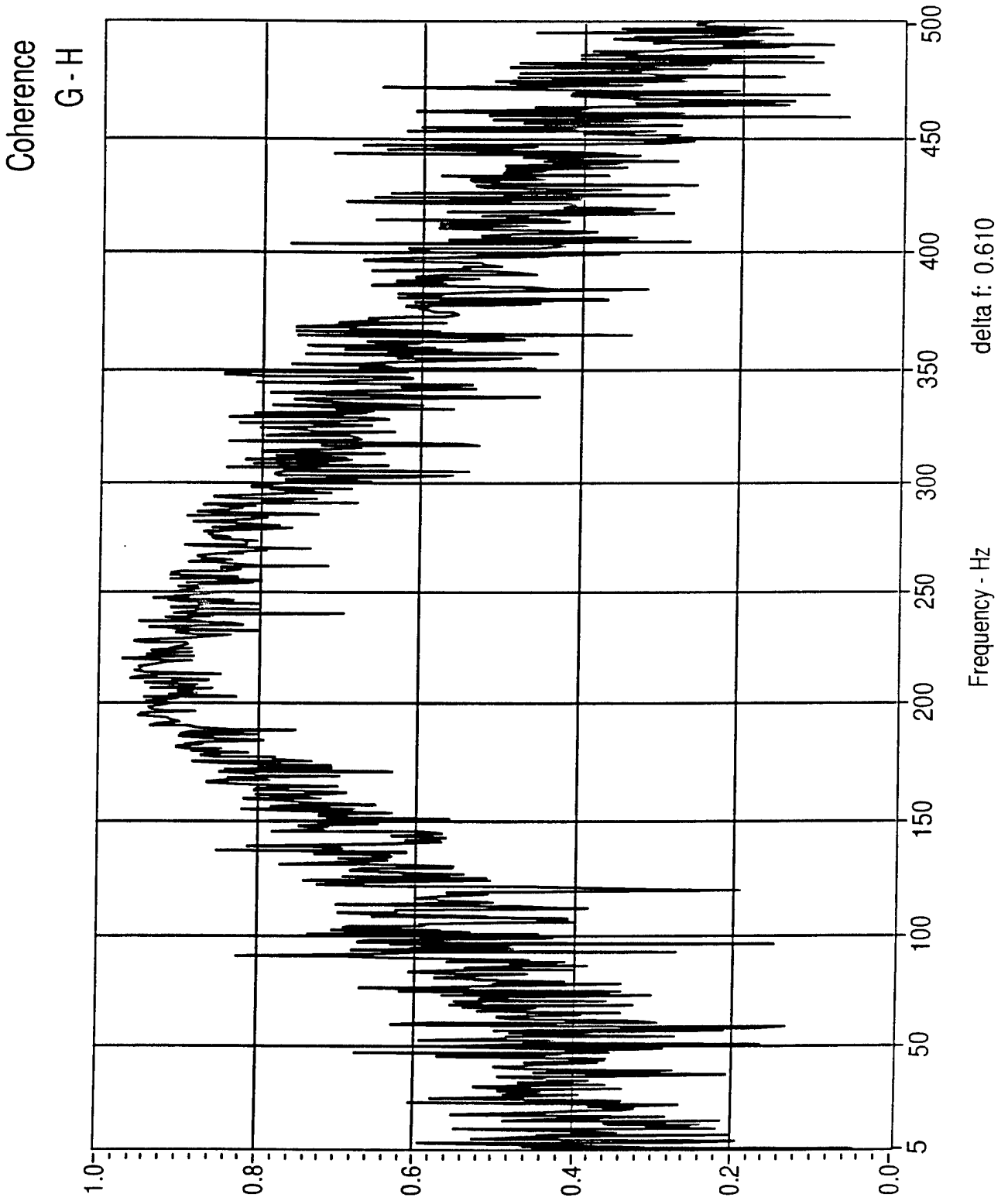
F-15 TPN\_2928: alpha=32 beta=4 bp=0



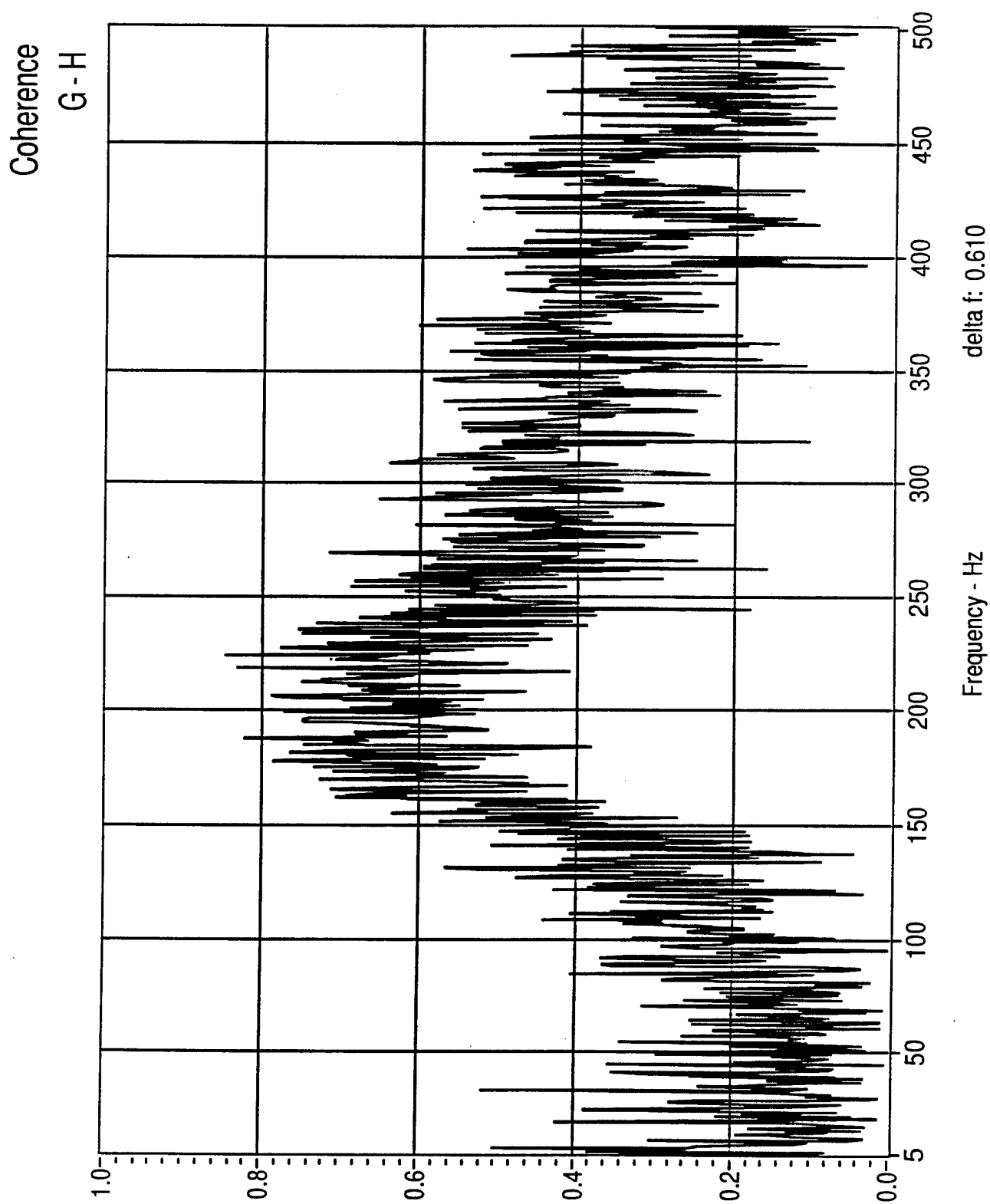




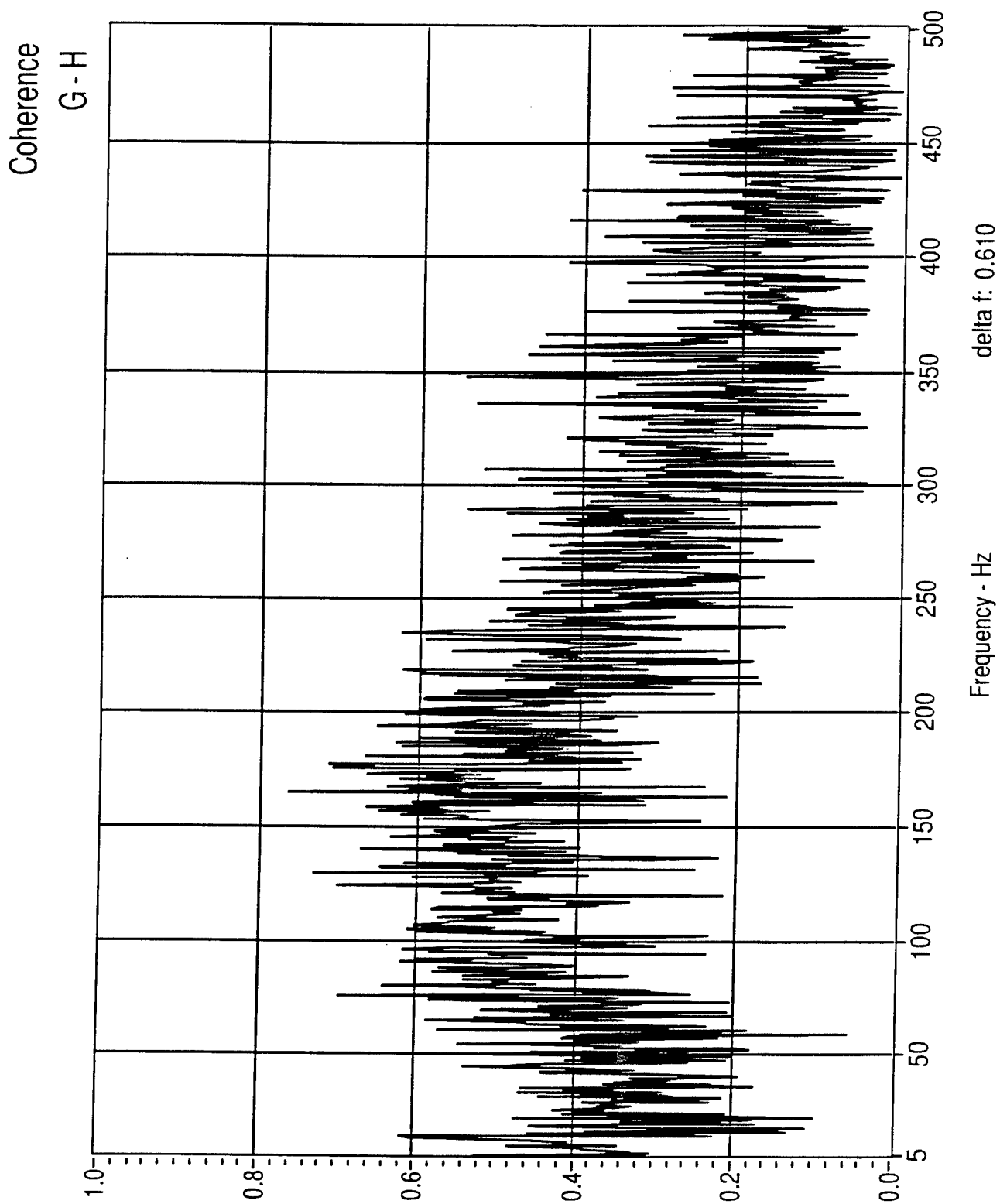
F-15 TPN\_2850: alpha=20 beta=0 bp=0



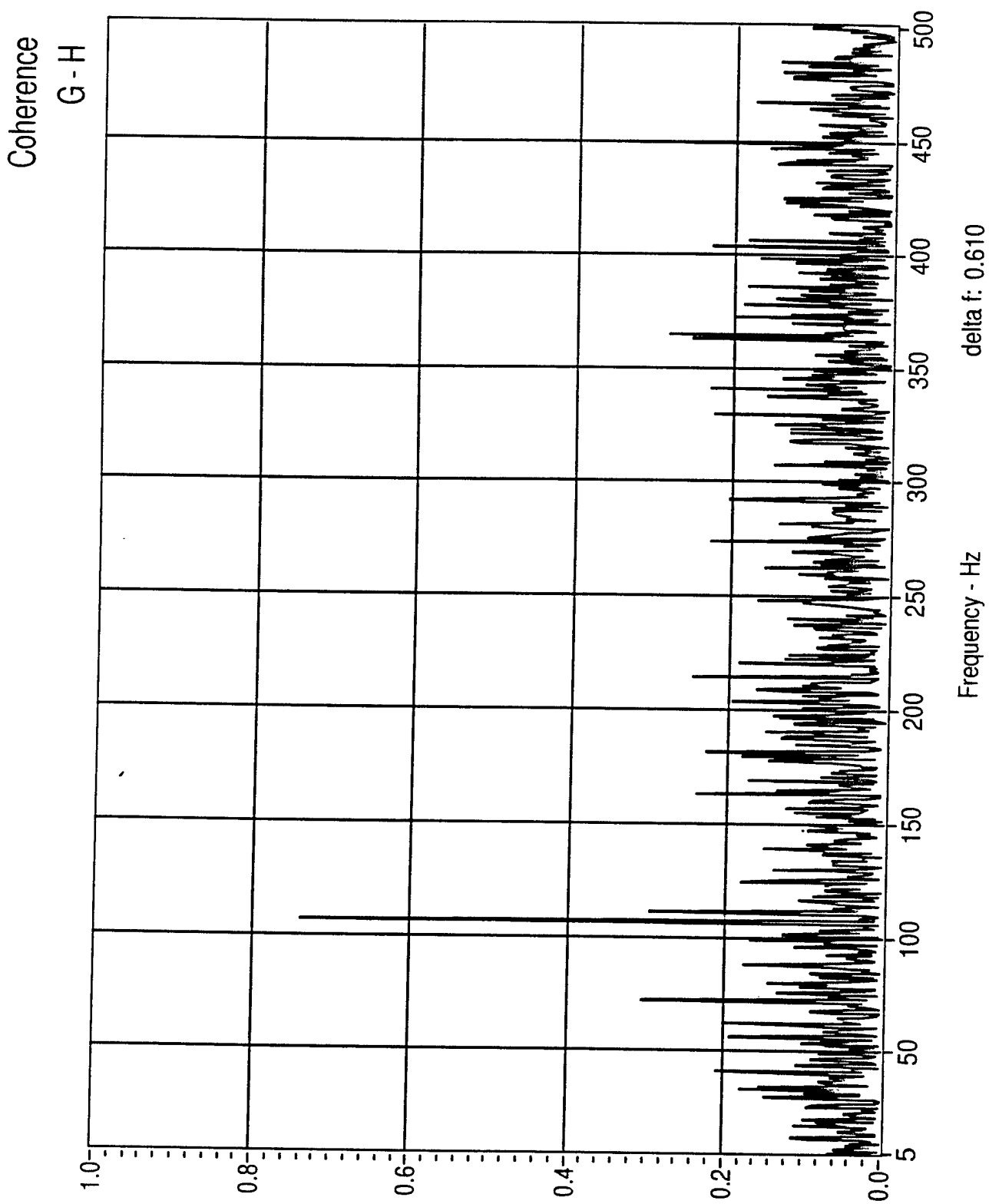
F-15 TPN\_2852: alpha=24 beta=0 bp=0



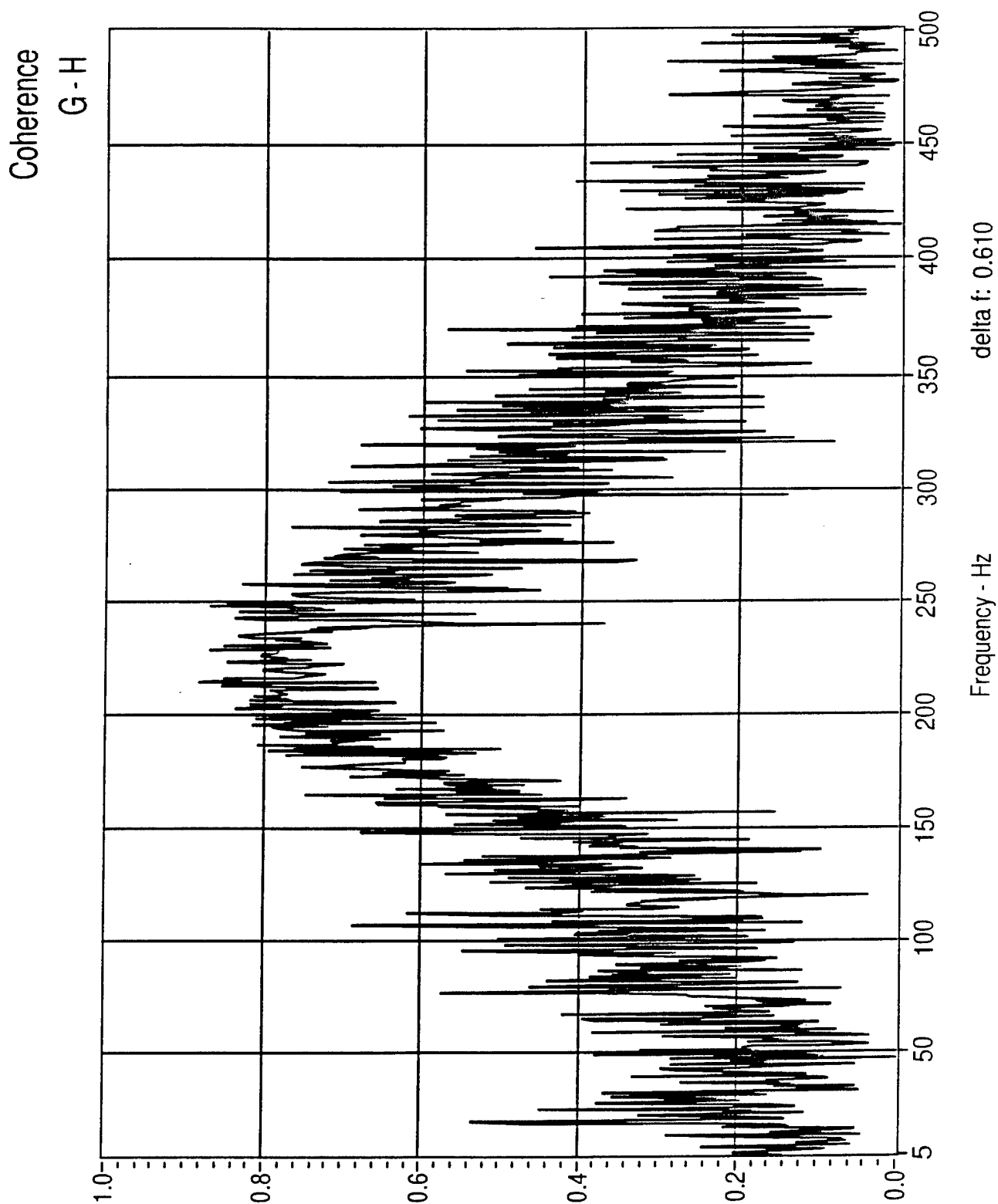
F-15 TPN\_2854: alpha=32 beta=0 bp=0



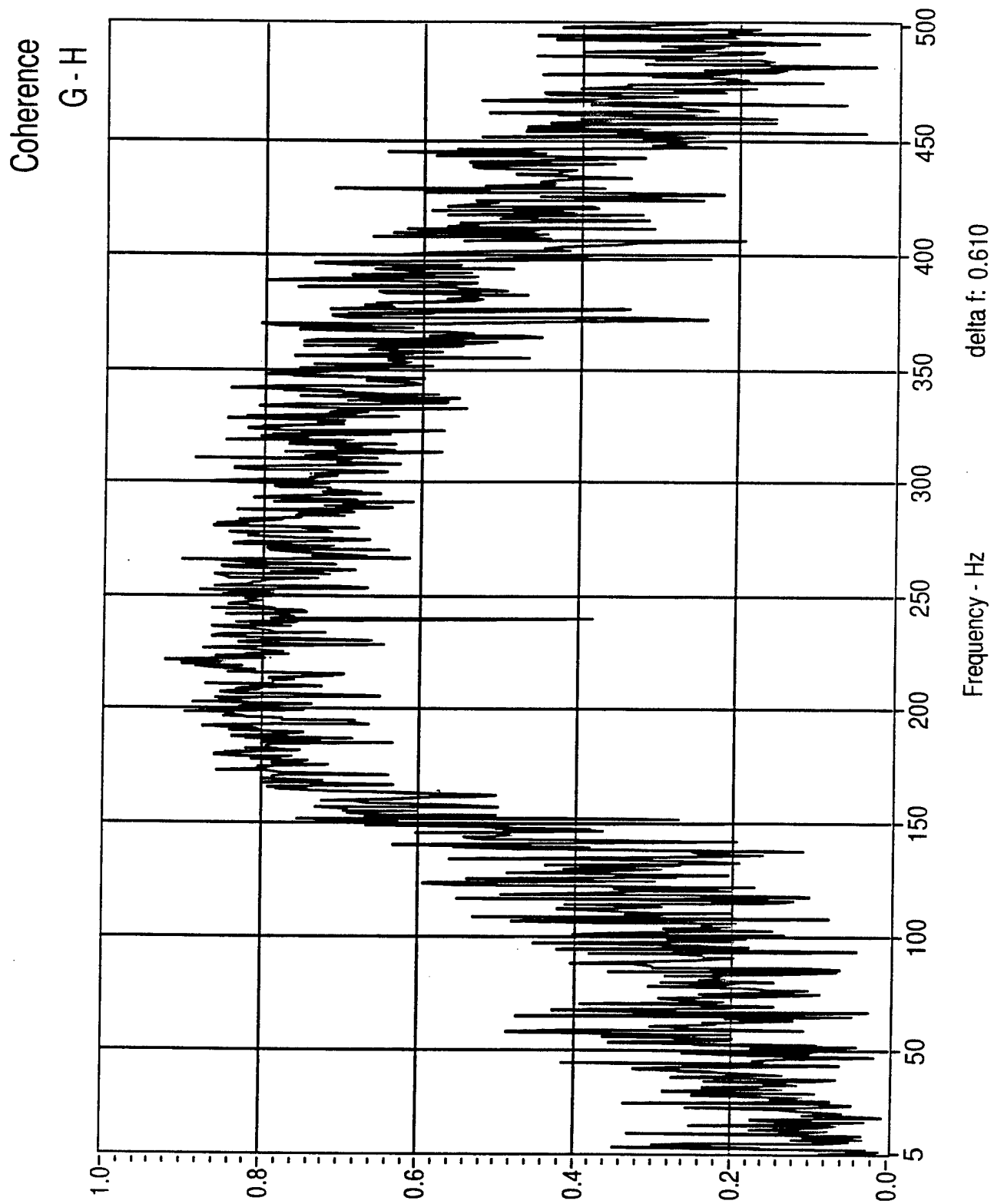
F-15 TPN\_2864: alpha=8 beta=-4 bp=0



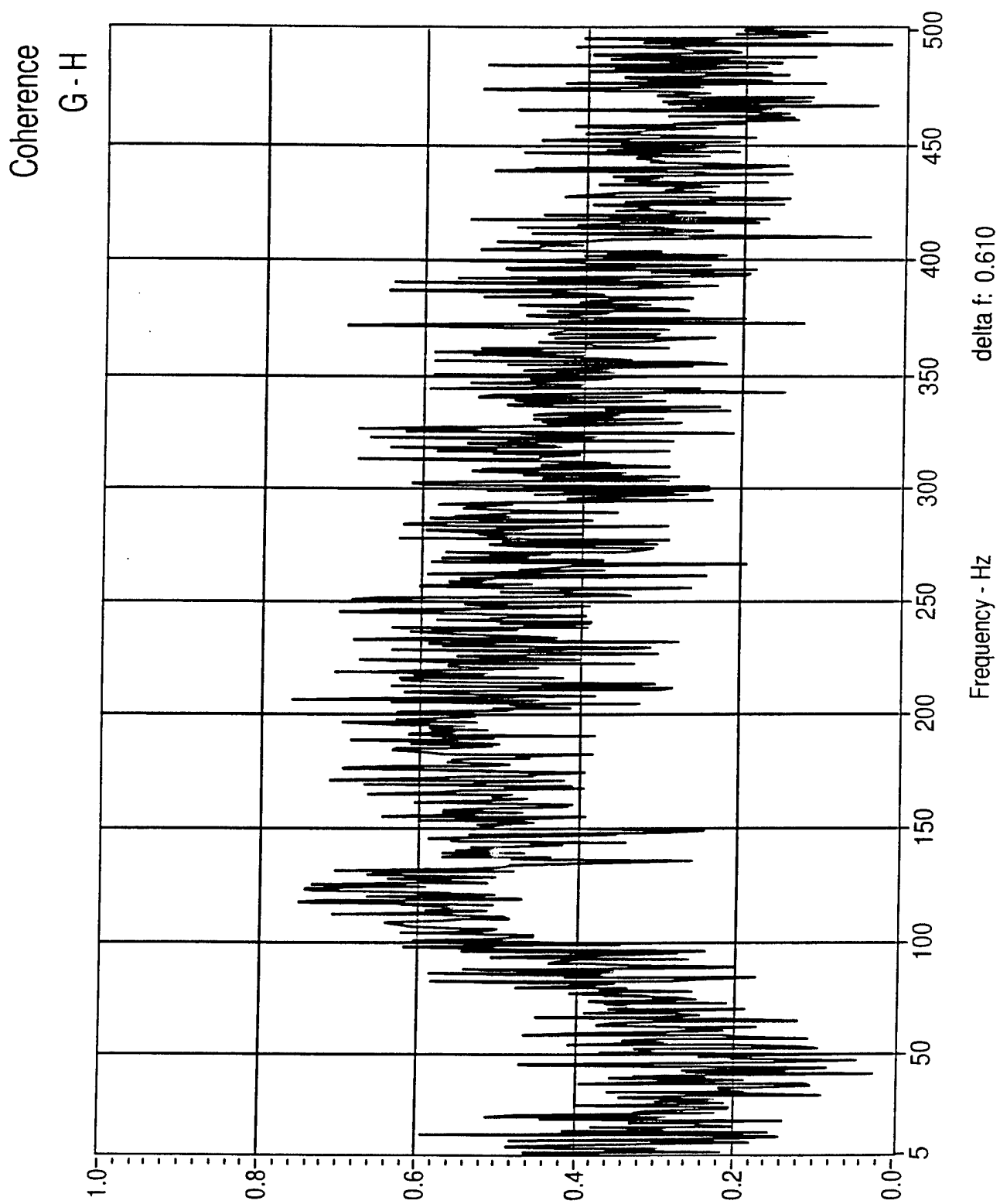
F-15 TPN\_2870: alpha=20 beta=-4 bp=0



F-15 TPN\_2872: alpha=24 beta=-4 bp=0

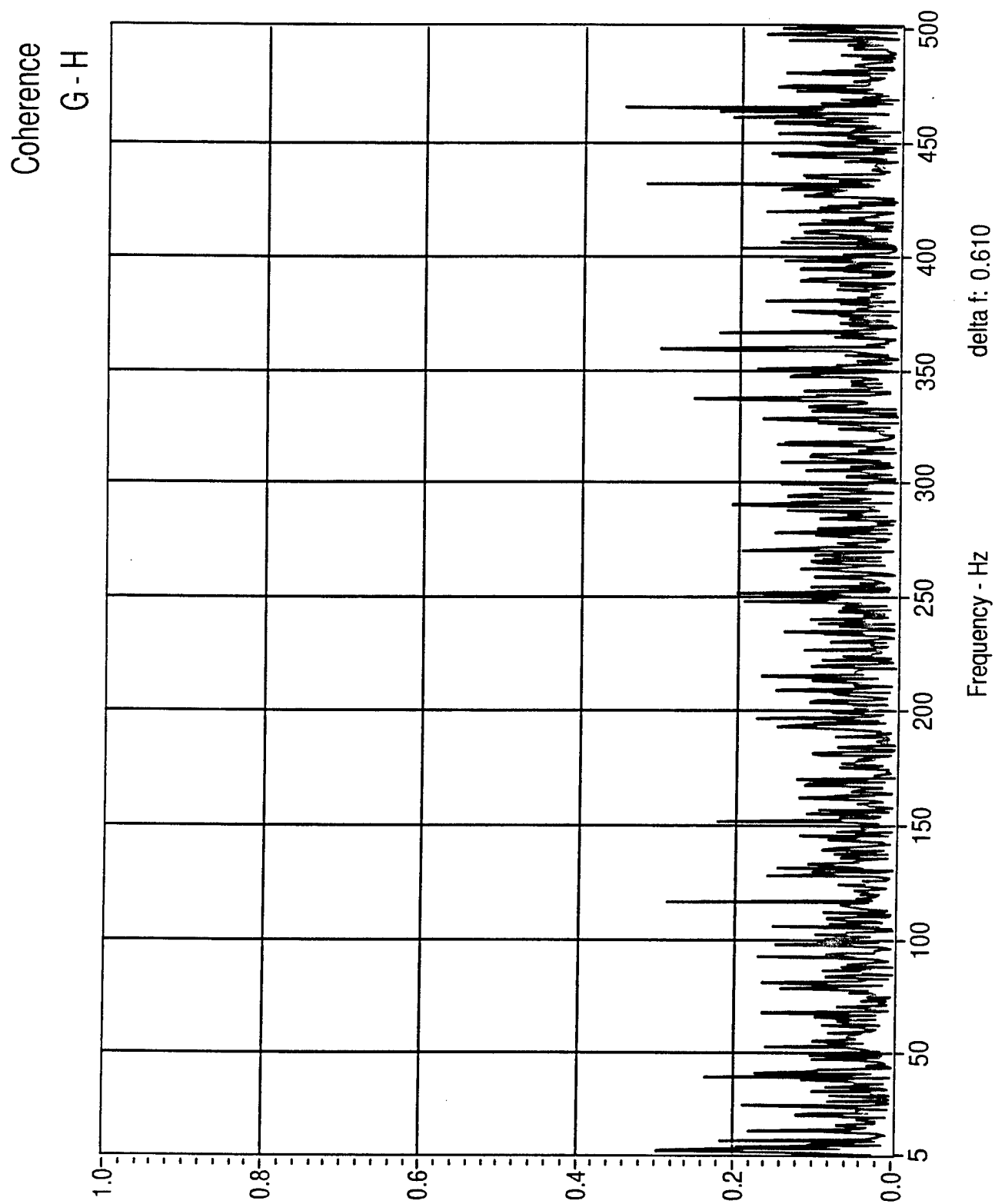


F-15 TPN\_2874: alpha=32 beta=-4 bp=0

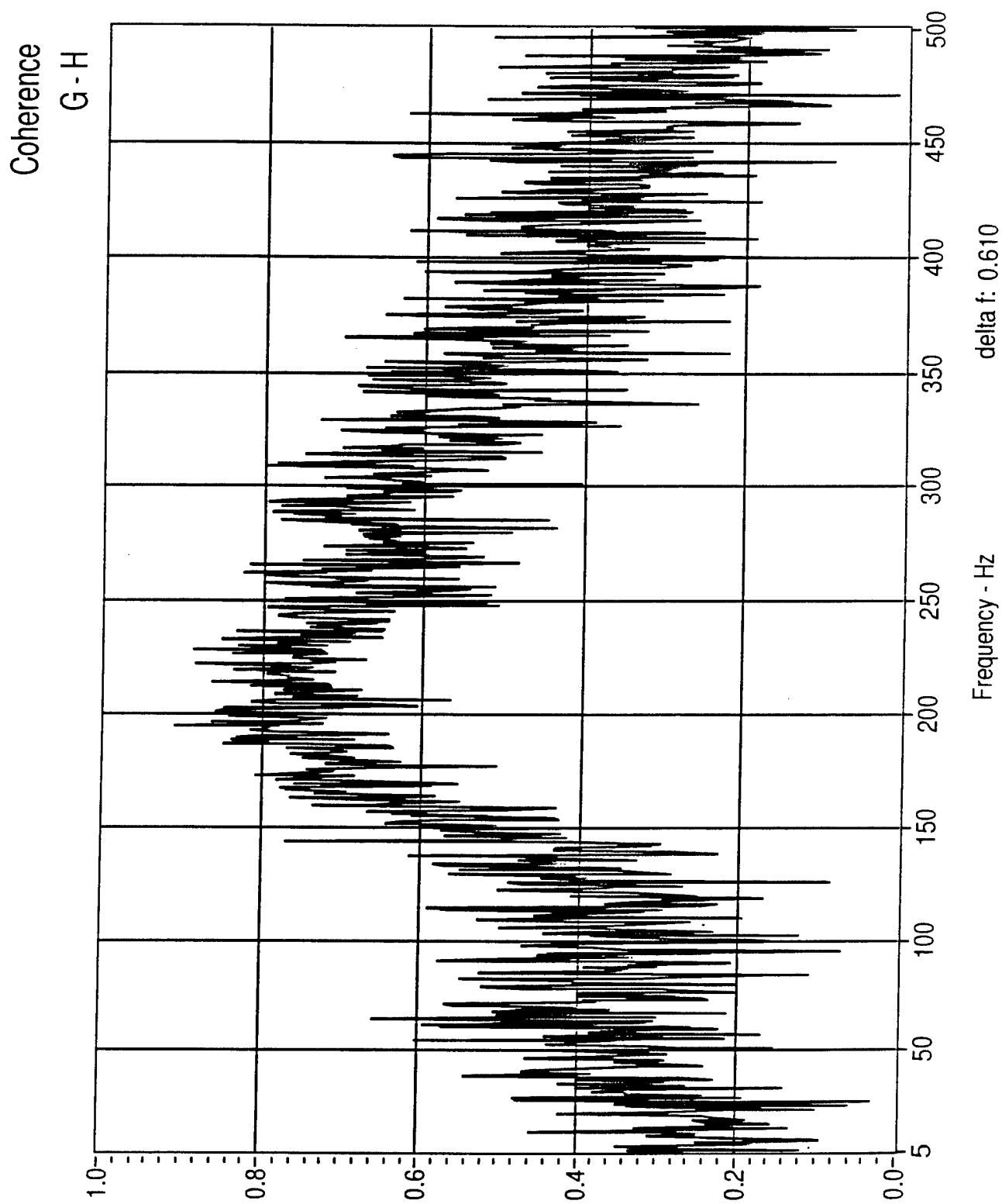




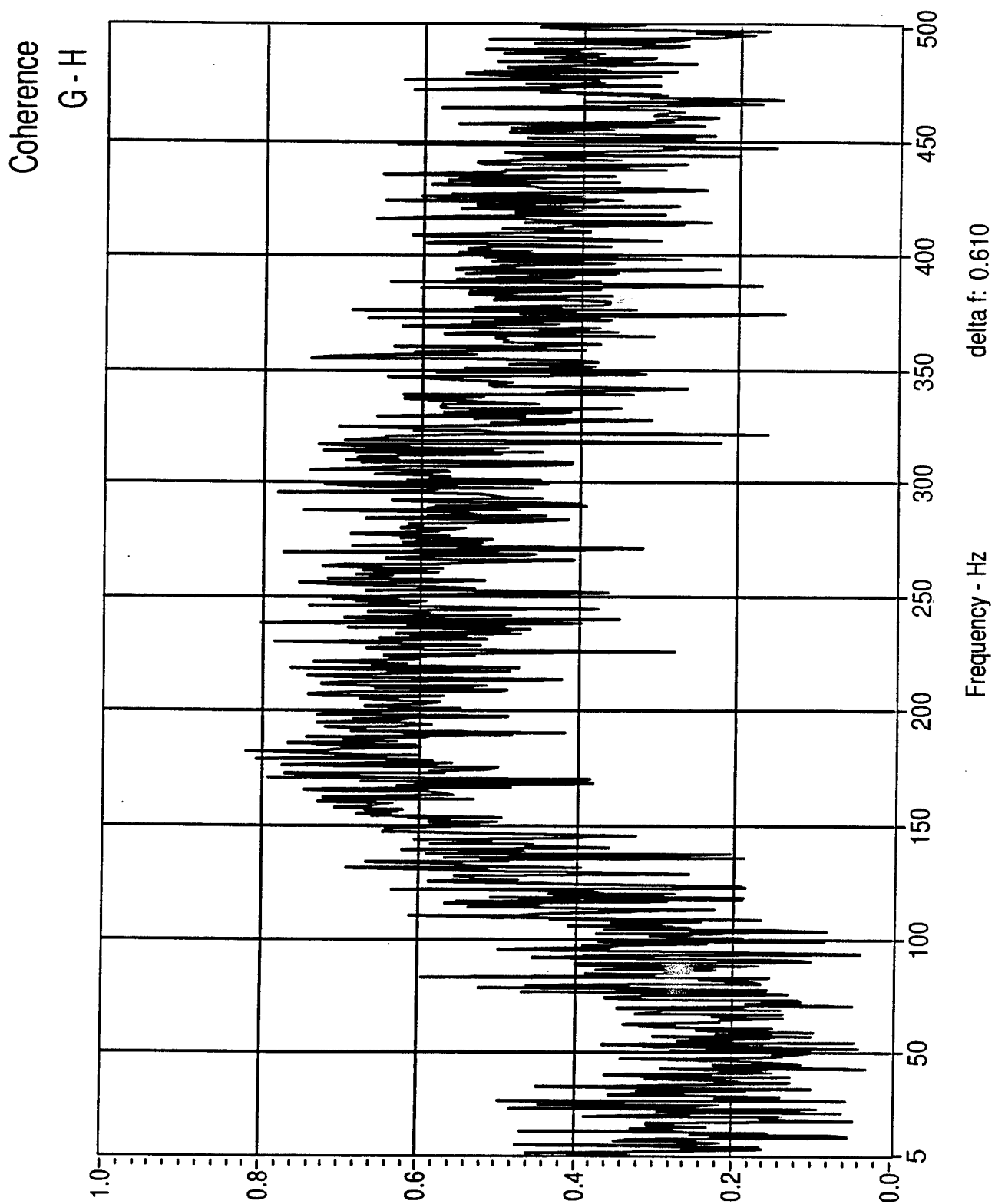
F-15 TPN\_3351: alpha=8 beta=4 bp=45



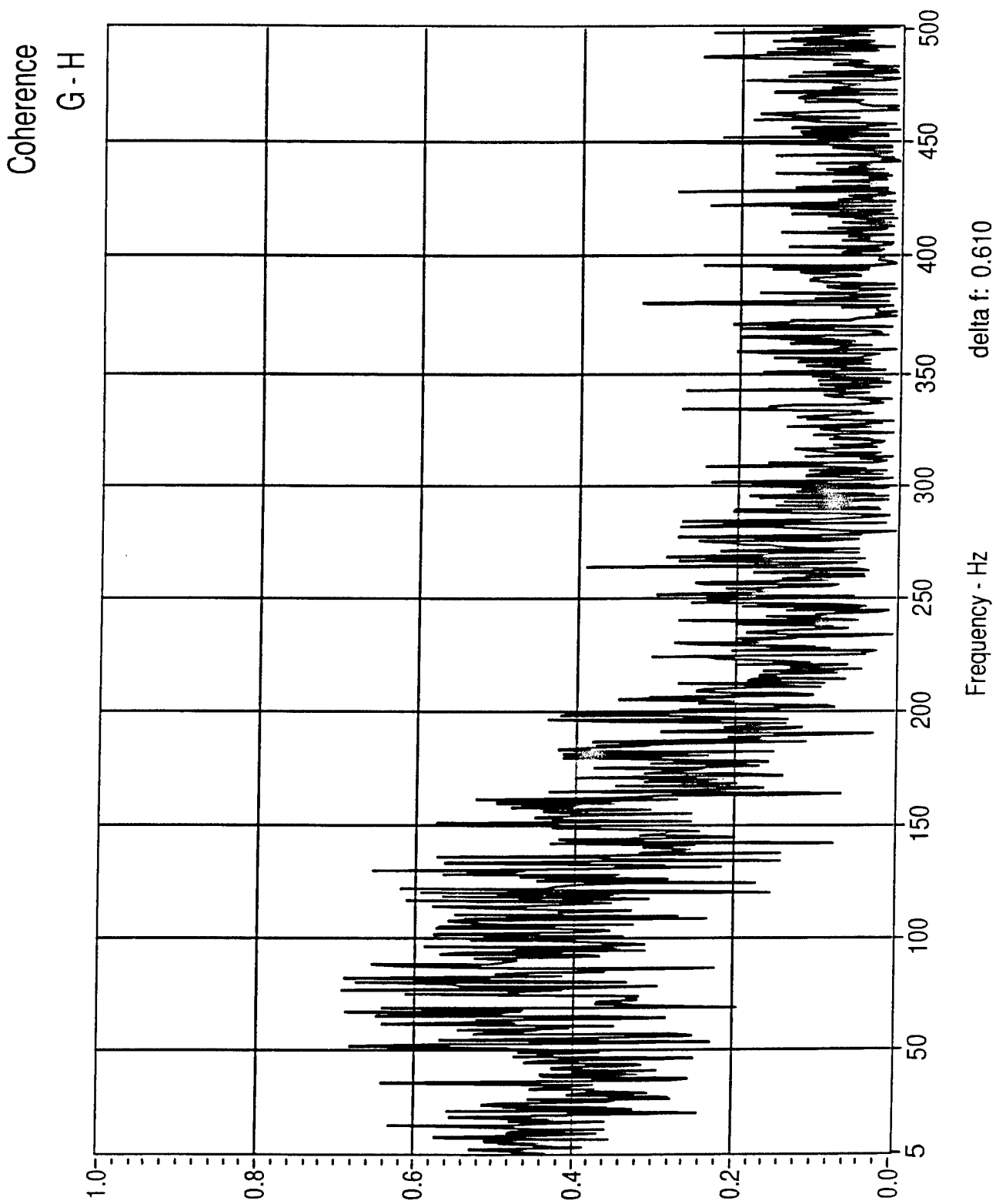
F-15 TPN\_3357: alpha=20 beta=4 bp=45



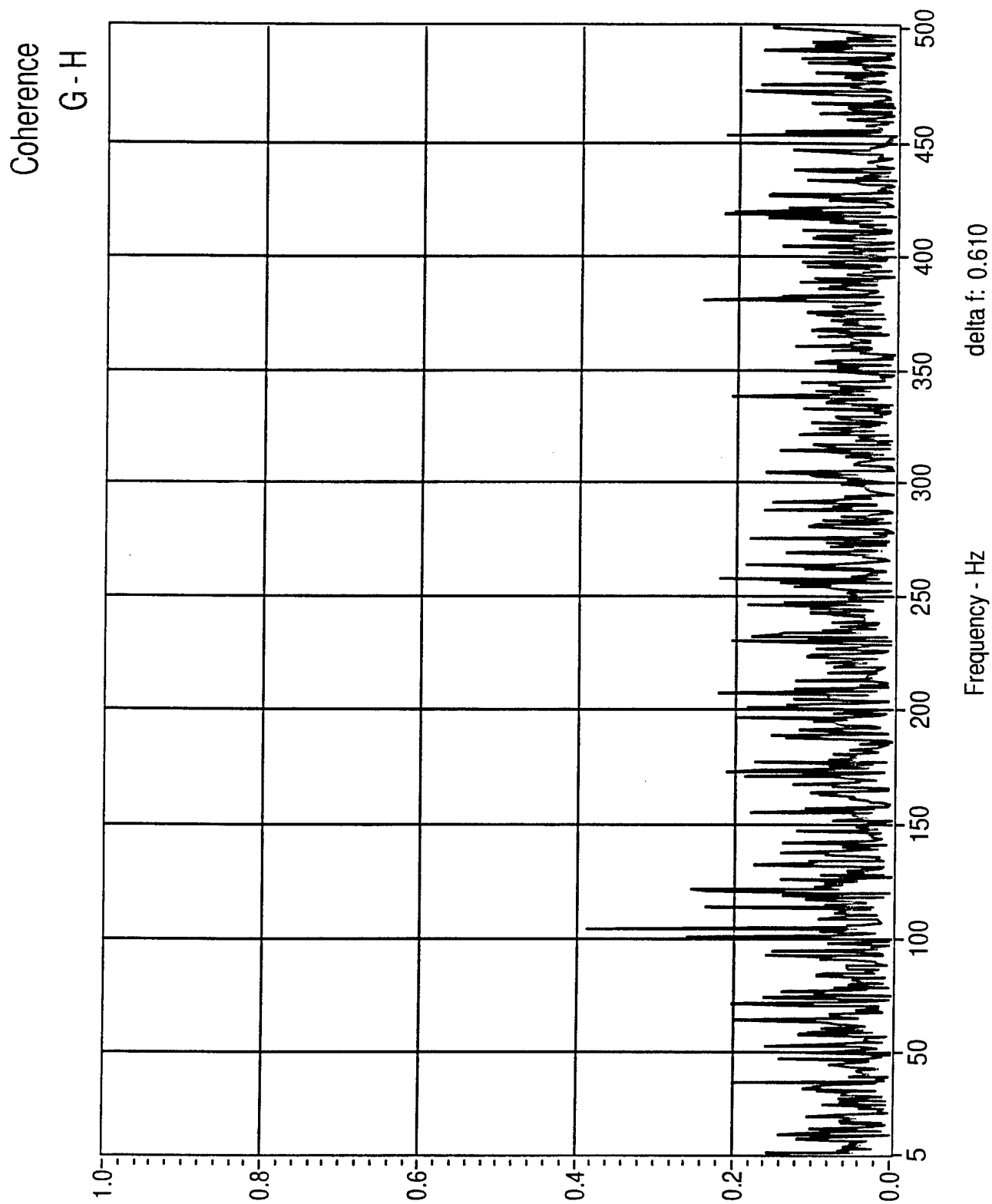
F-15 TPN\_3359: alpha=24 beta=4 bp=45



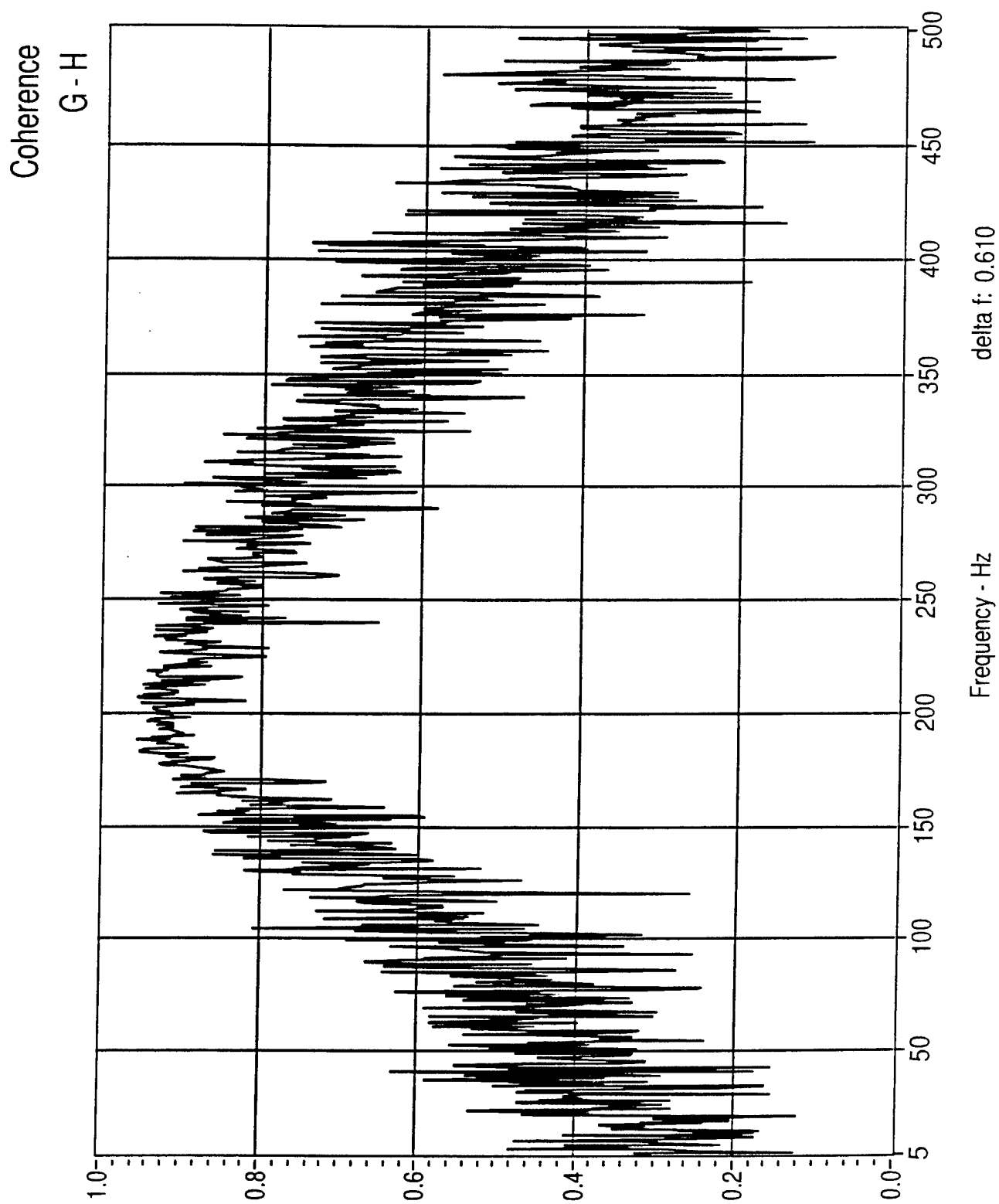
F-15 TPN\_3361: alpha=32 beta=4 bp=45



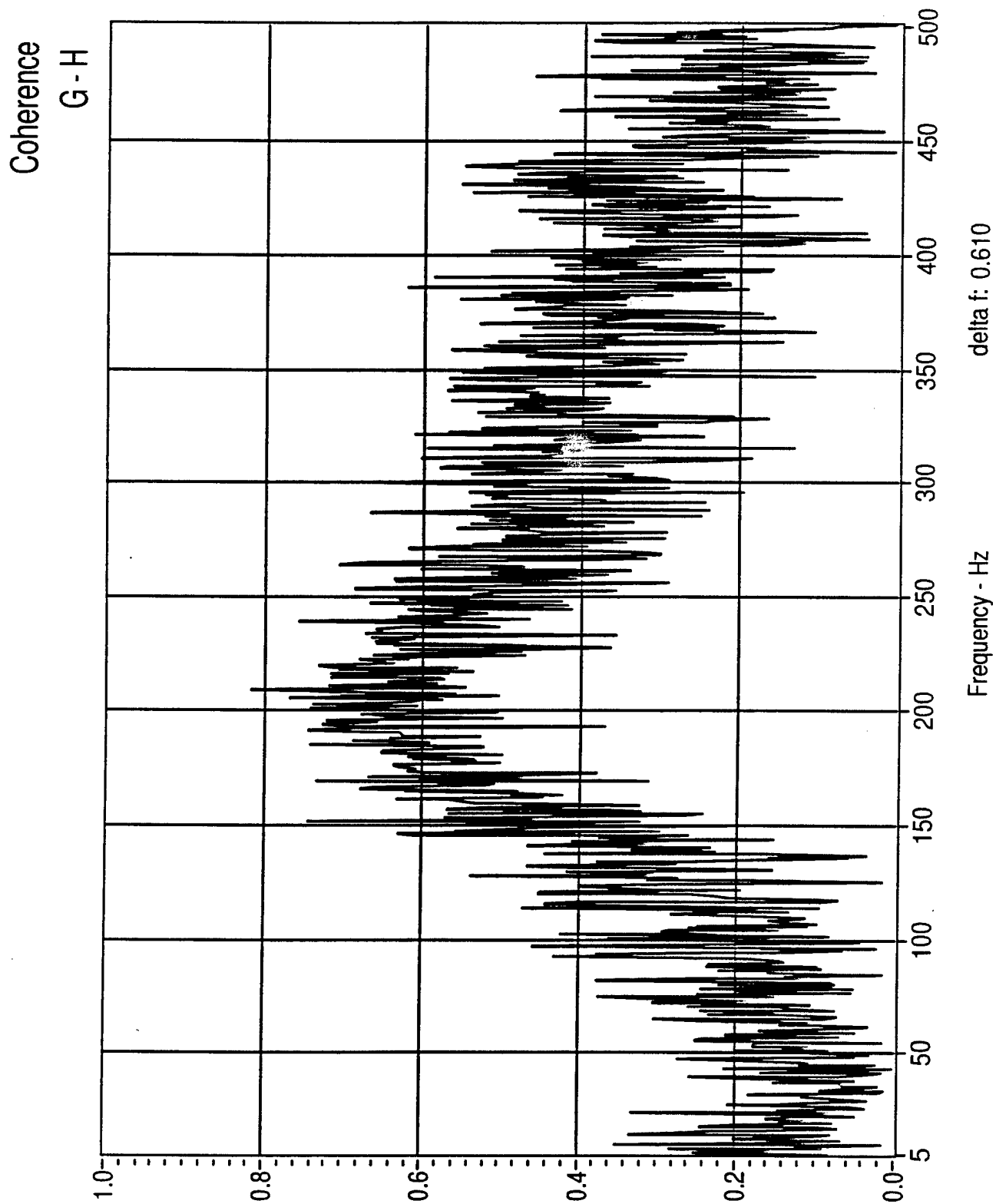
F-15 TPN\_3333: alpha=8 beta=0 bp=45



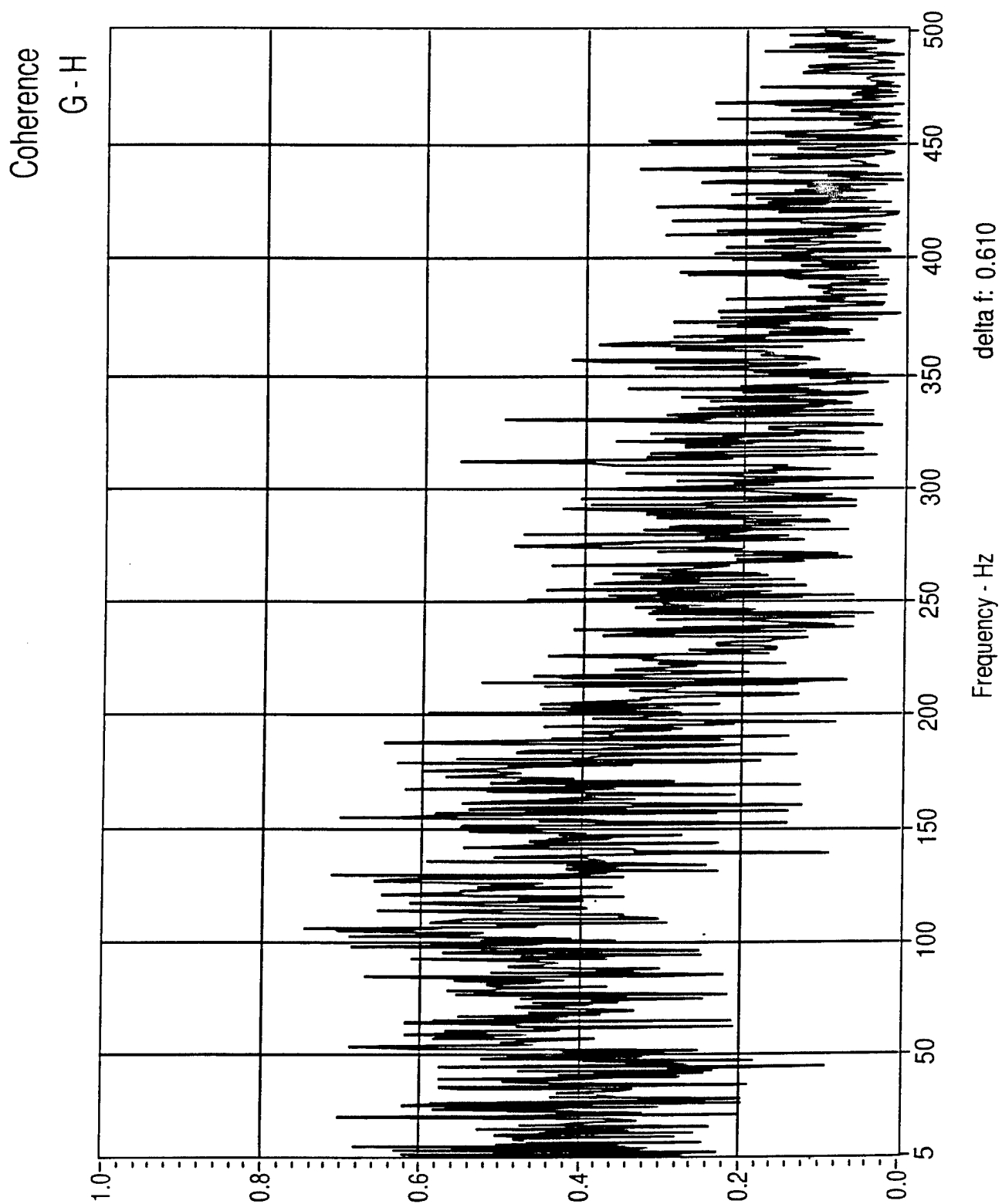
F-15 TPN\_3339: alpha=20 beta=0 bp=45



F-15 TPN\_3341: alpha=24 beta=0 bp=45

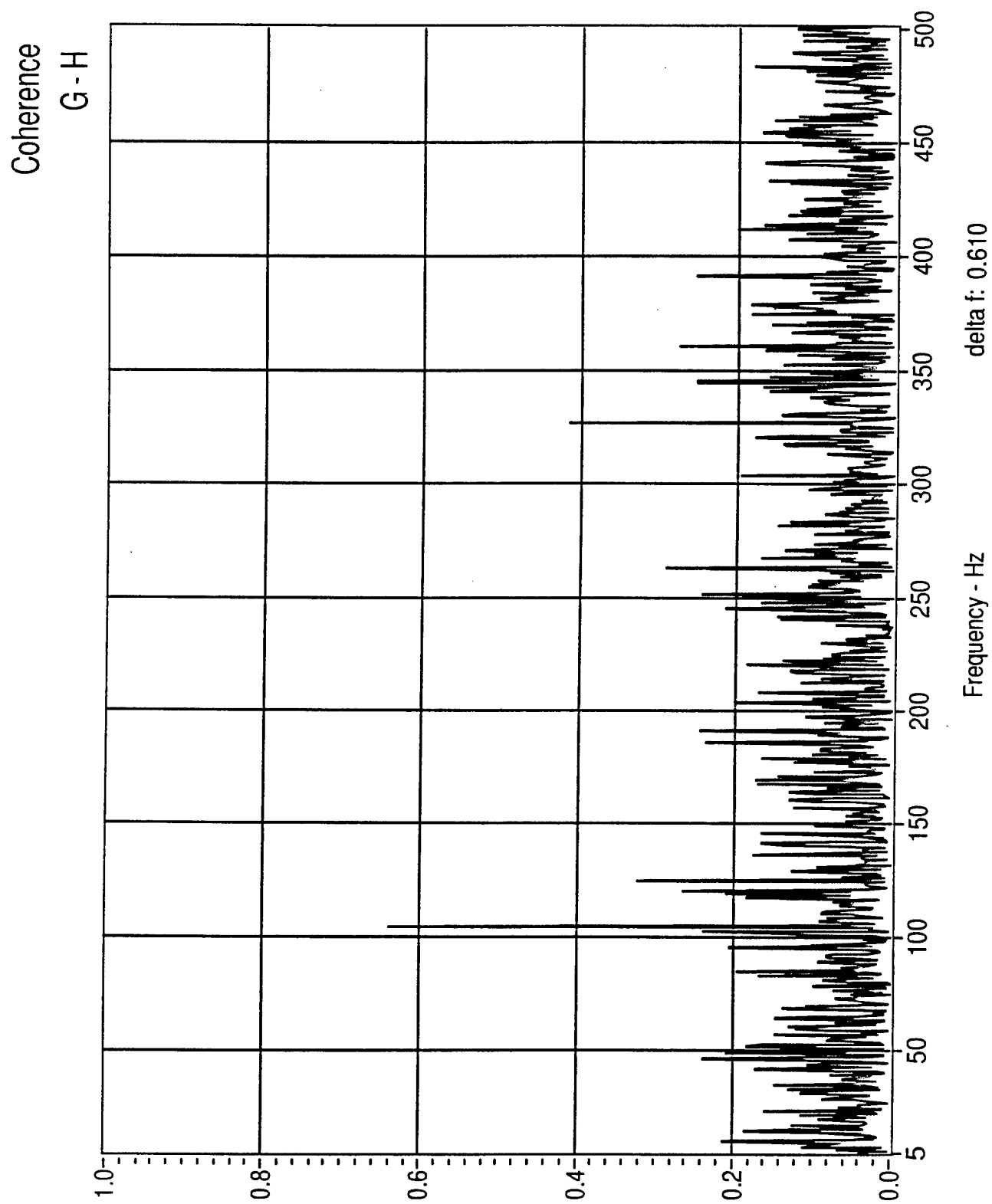


F-15 TPN\_3343: alpha=32 beta=0 bp=45

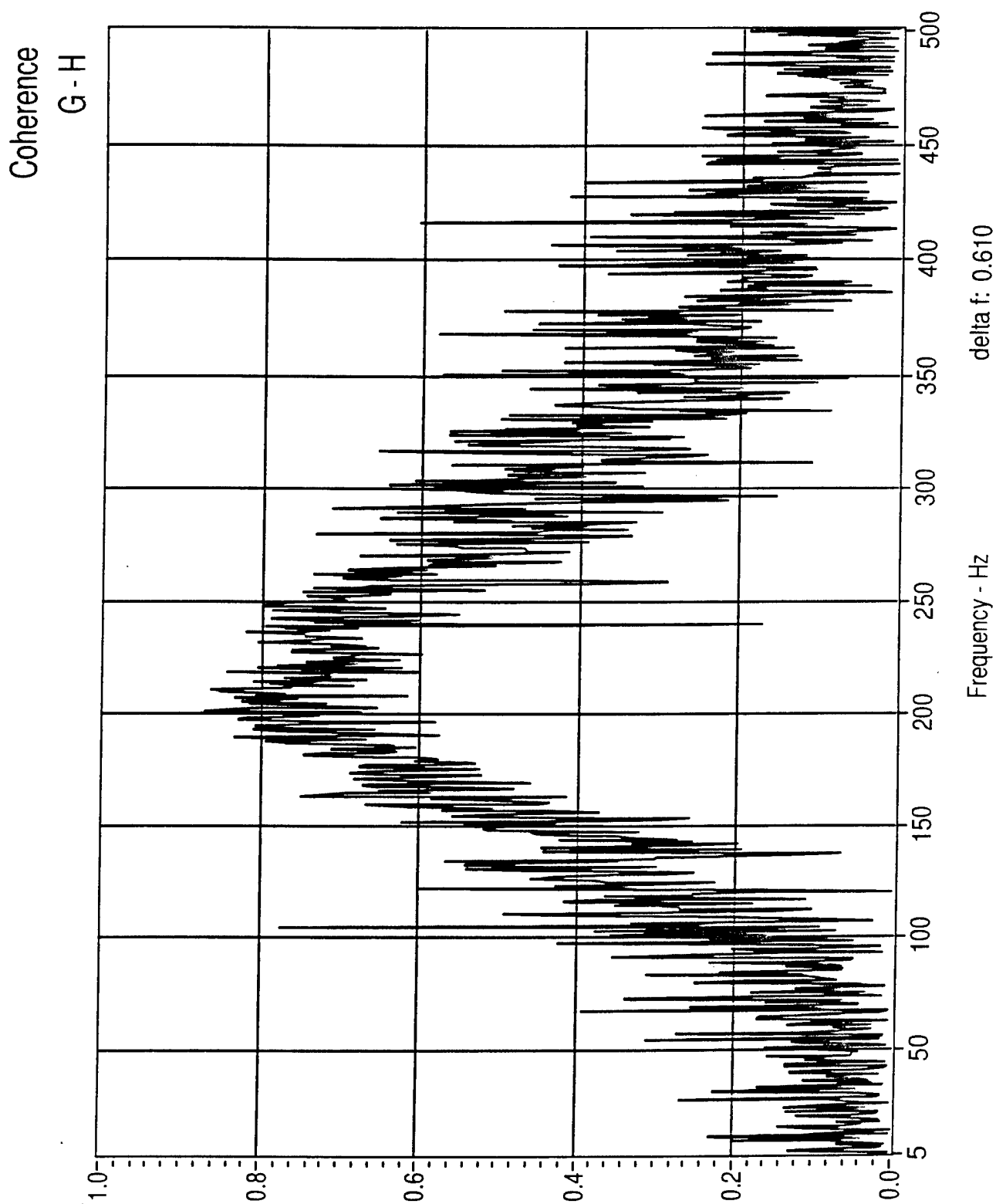




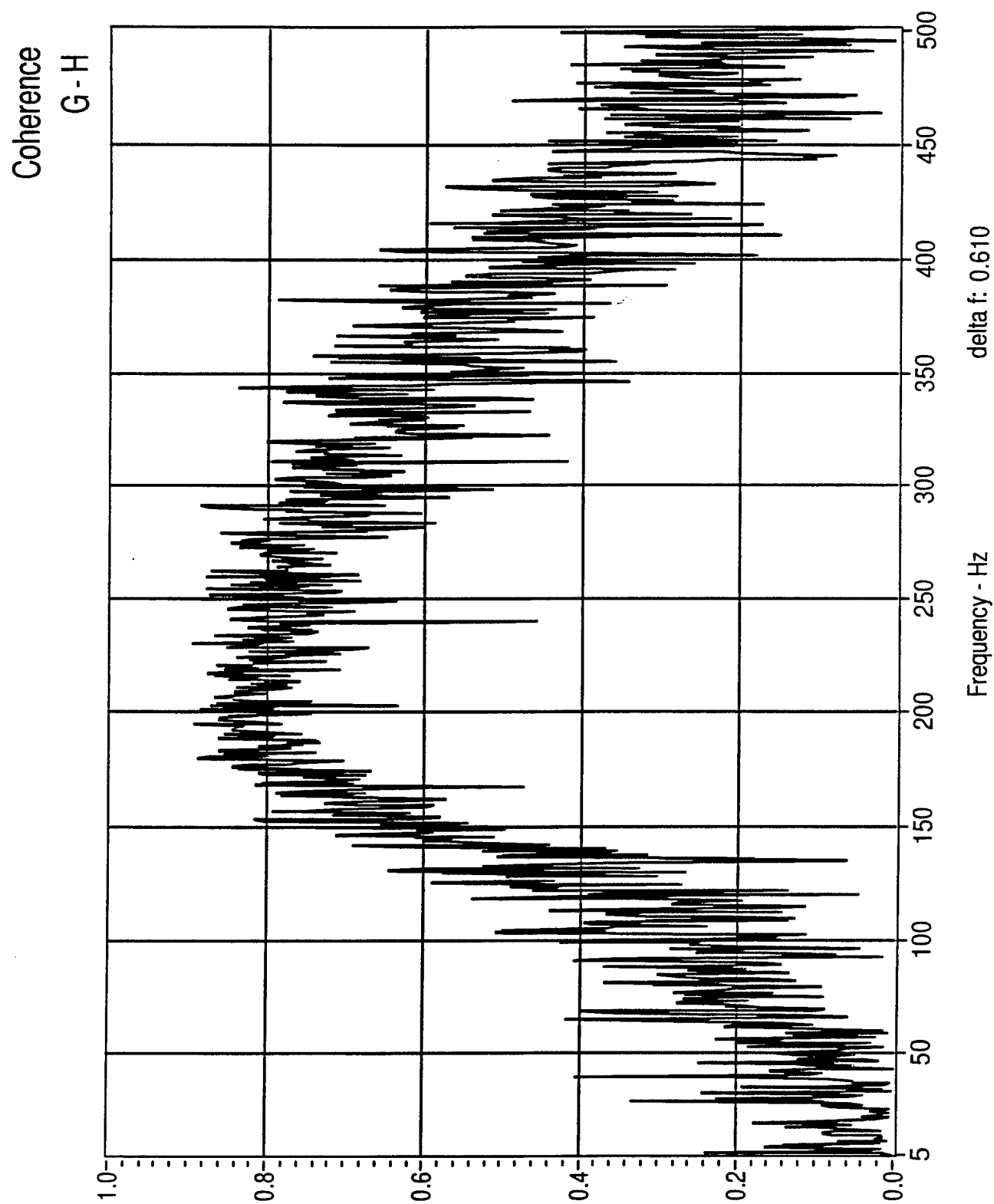
F-15 TPN\_3369: alpha=8 beta=-4 bp=45



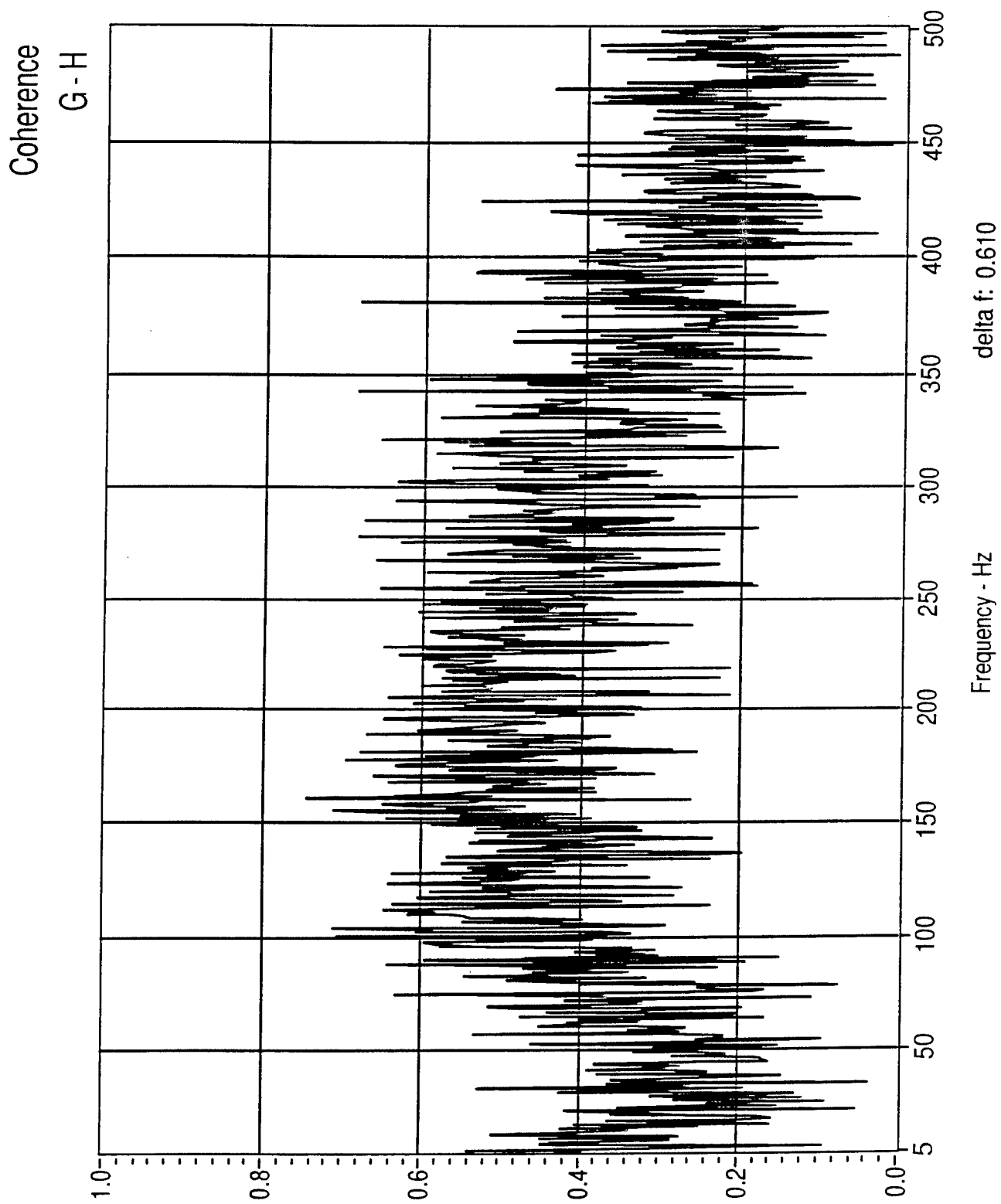
F-15 TPN\_3375: alpha=20 beta=-4 bp=45



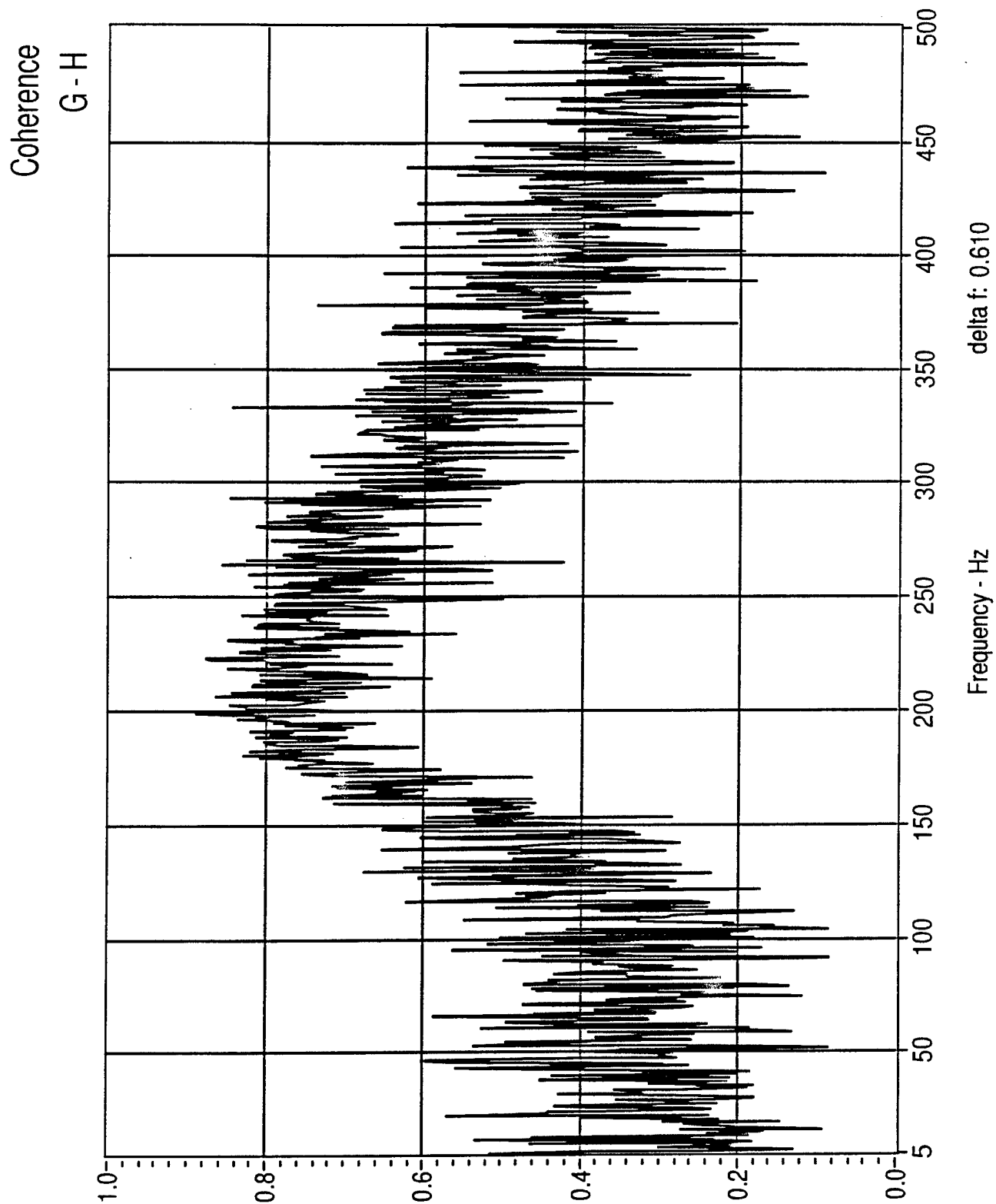
F-15 TPN\_3377: alpha=24 beta=-4 bp=45



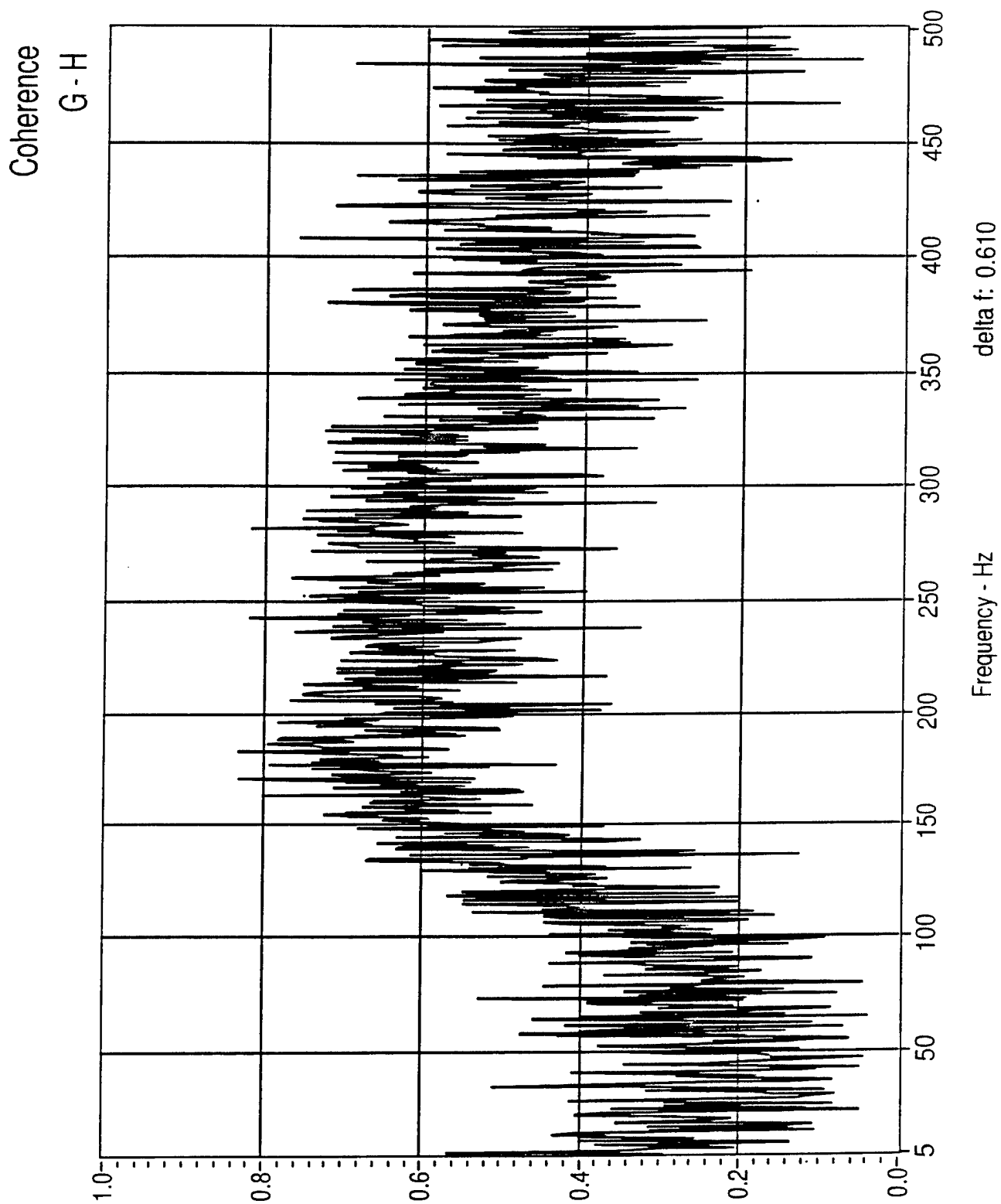
F-15 TPN\_3379: alpha=32 beta=-4 bp=45



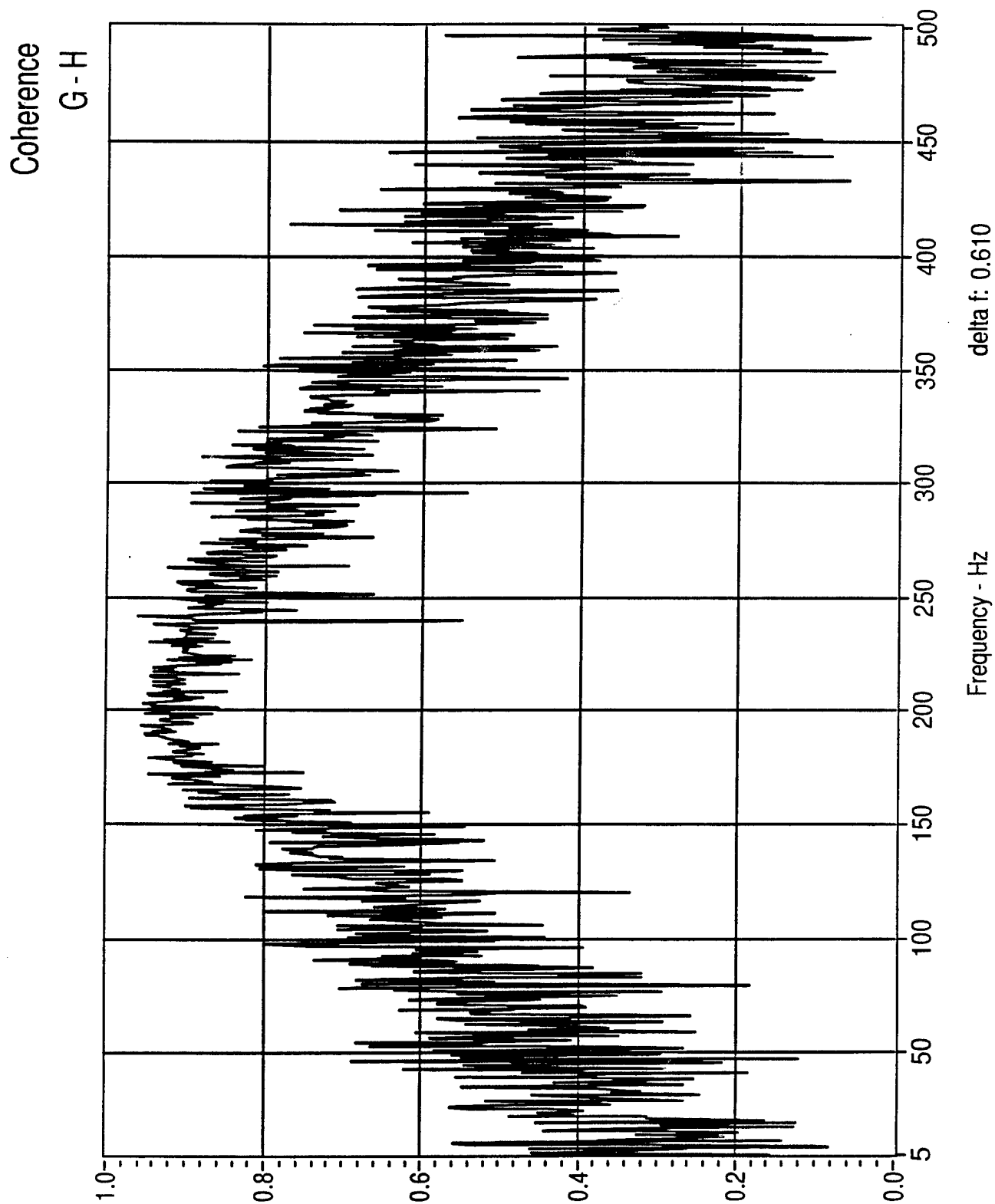
F-15 TPN\_3046: alpha=20 beta=4 bp=65



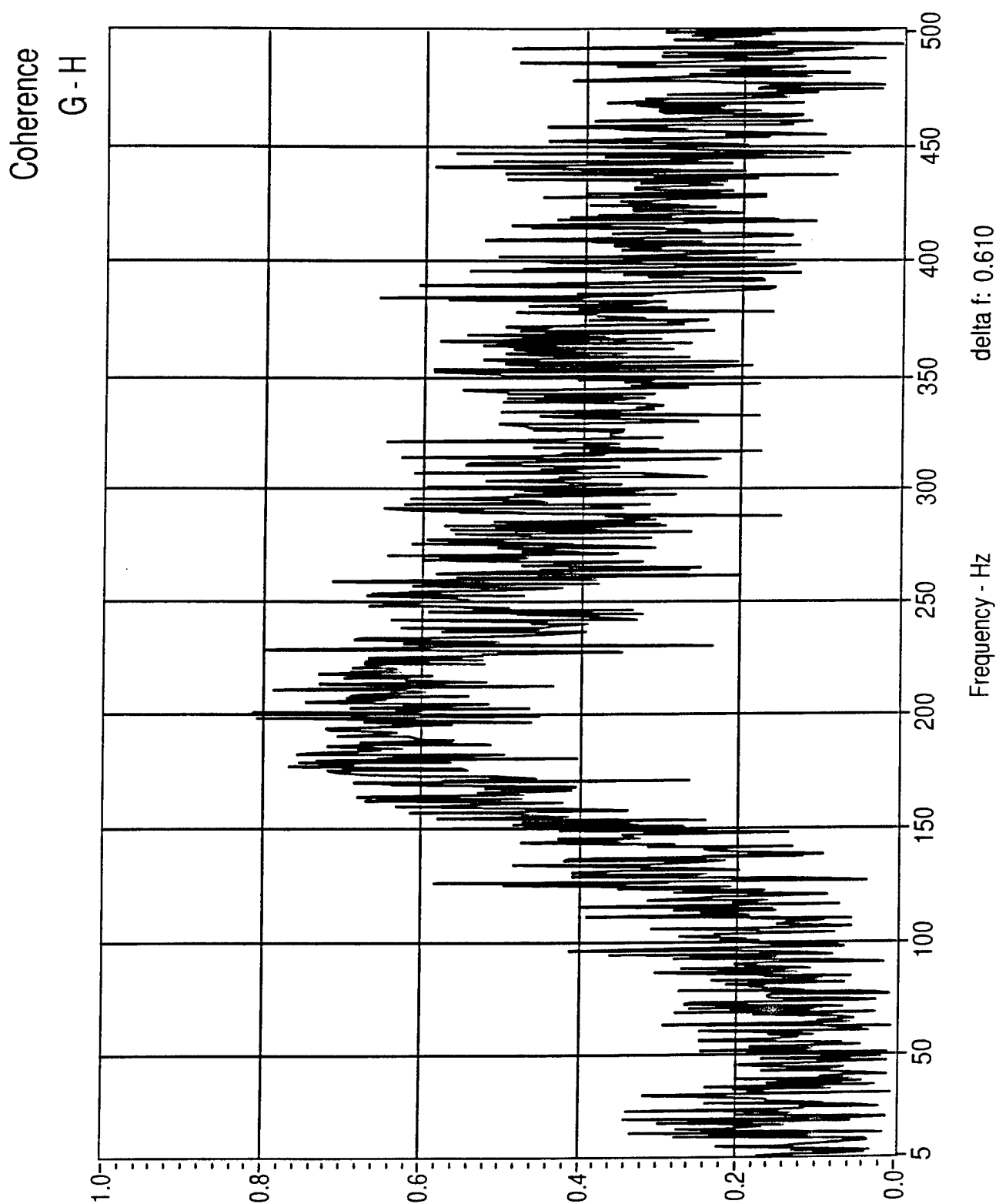
F-15 TPN\_3048: alpha=24 beta=4 bp=65



F-15 TPN\_3040: alpha=20 beta=0 bp=65

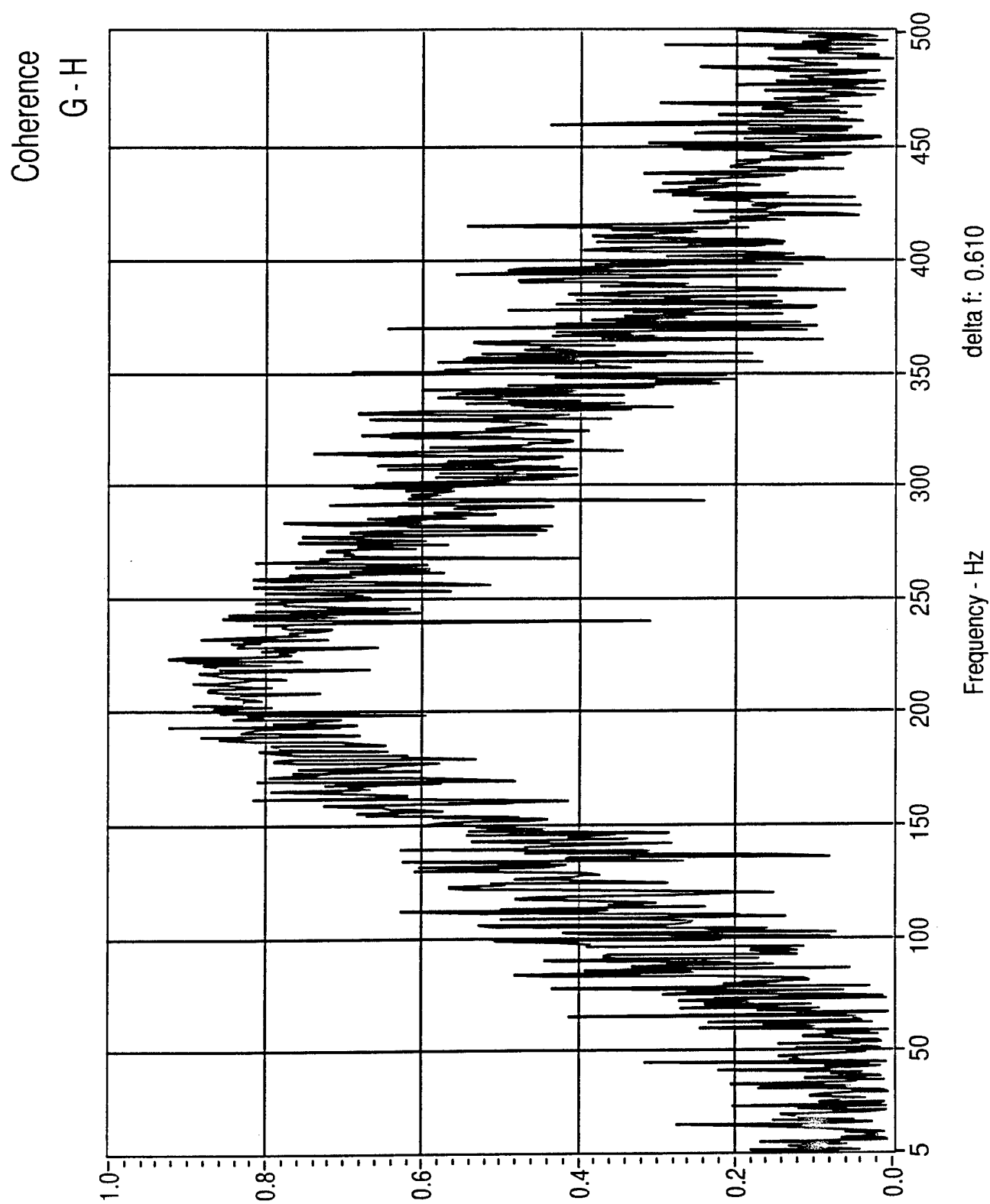


F-15 TPN\_3042: alpha=24 beta=0 bp=65

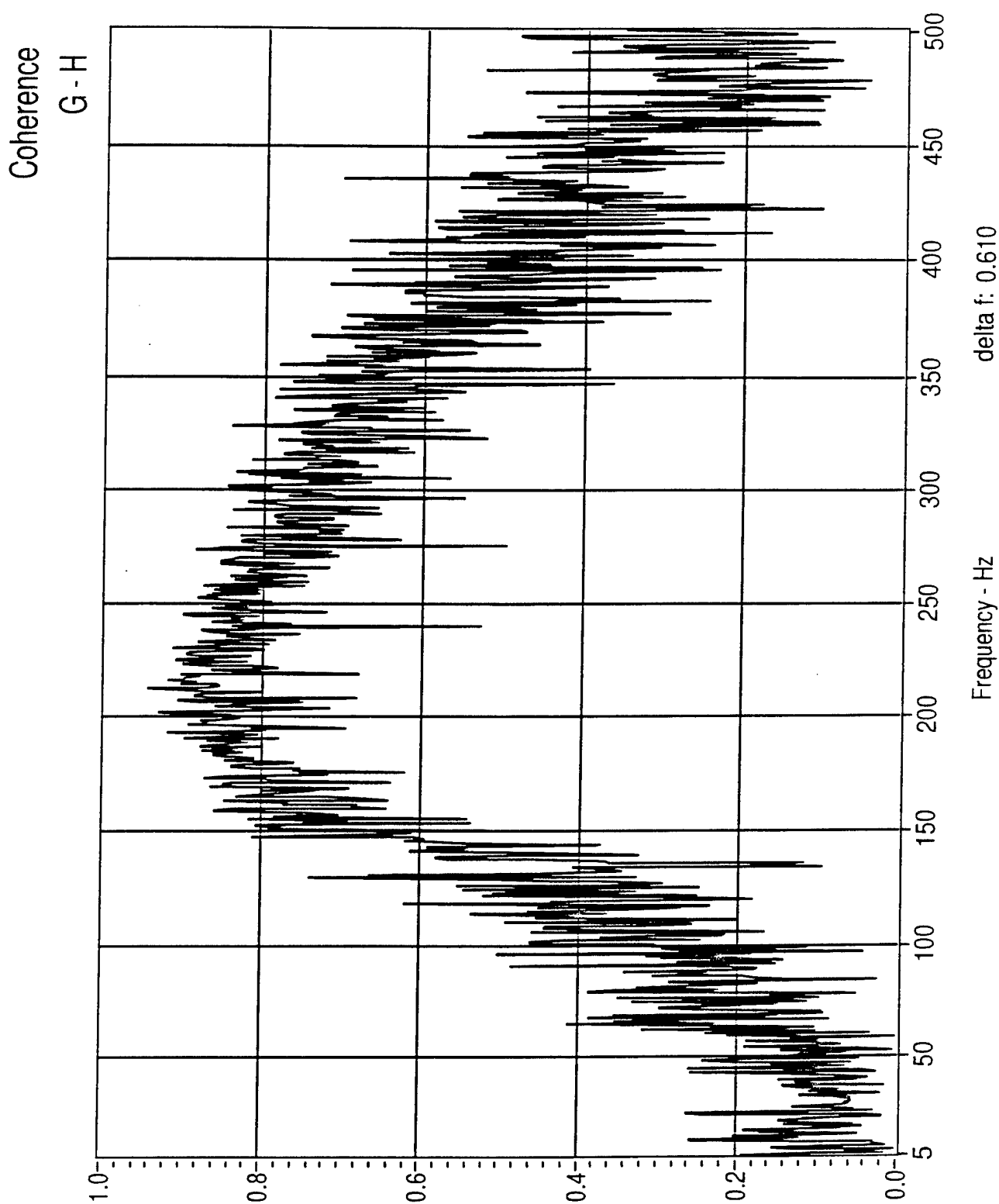




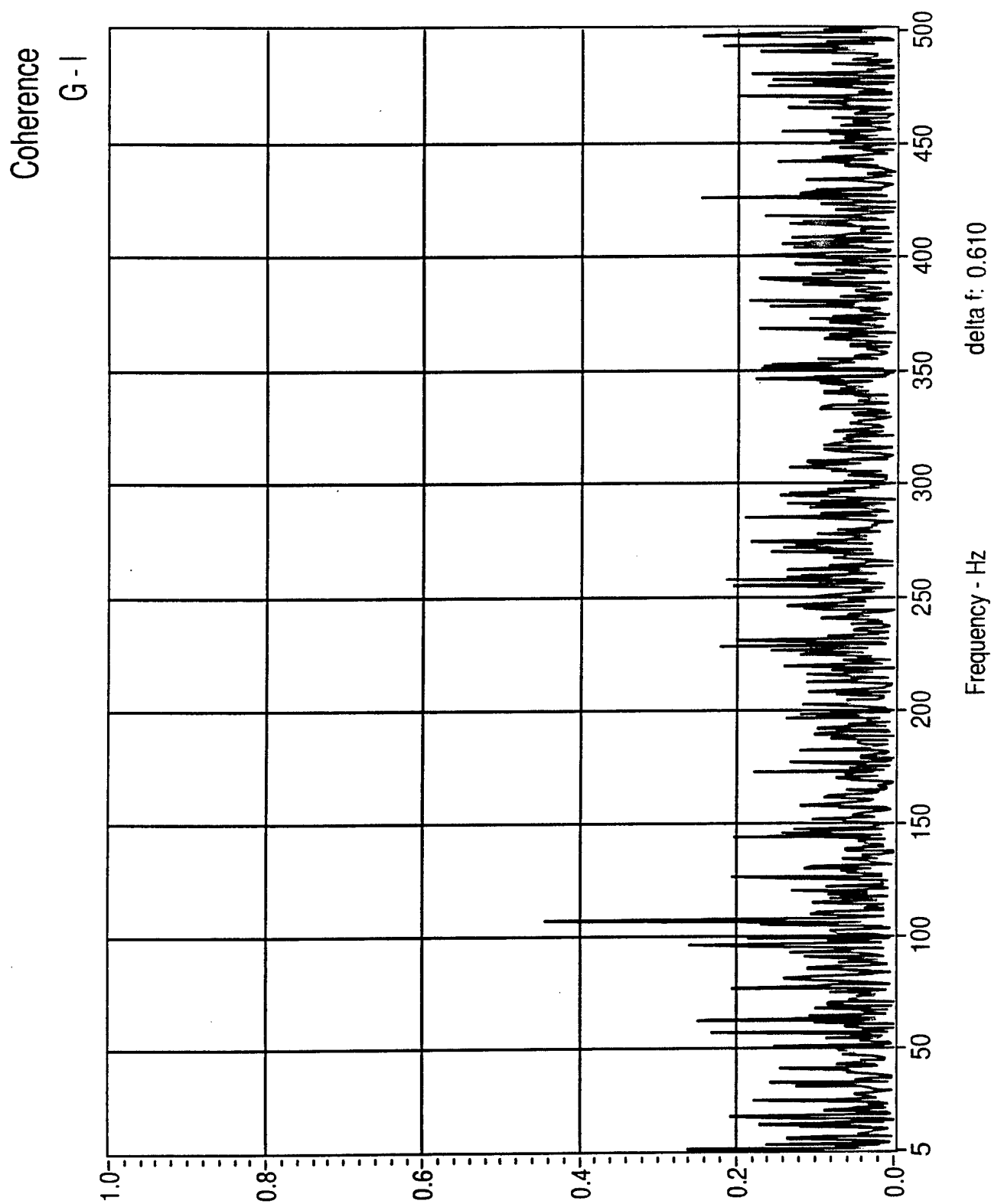
F-15 TPN\_3034:  $\alpha=20$   $\beta=-4$   $\text{bp}=65$



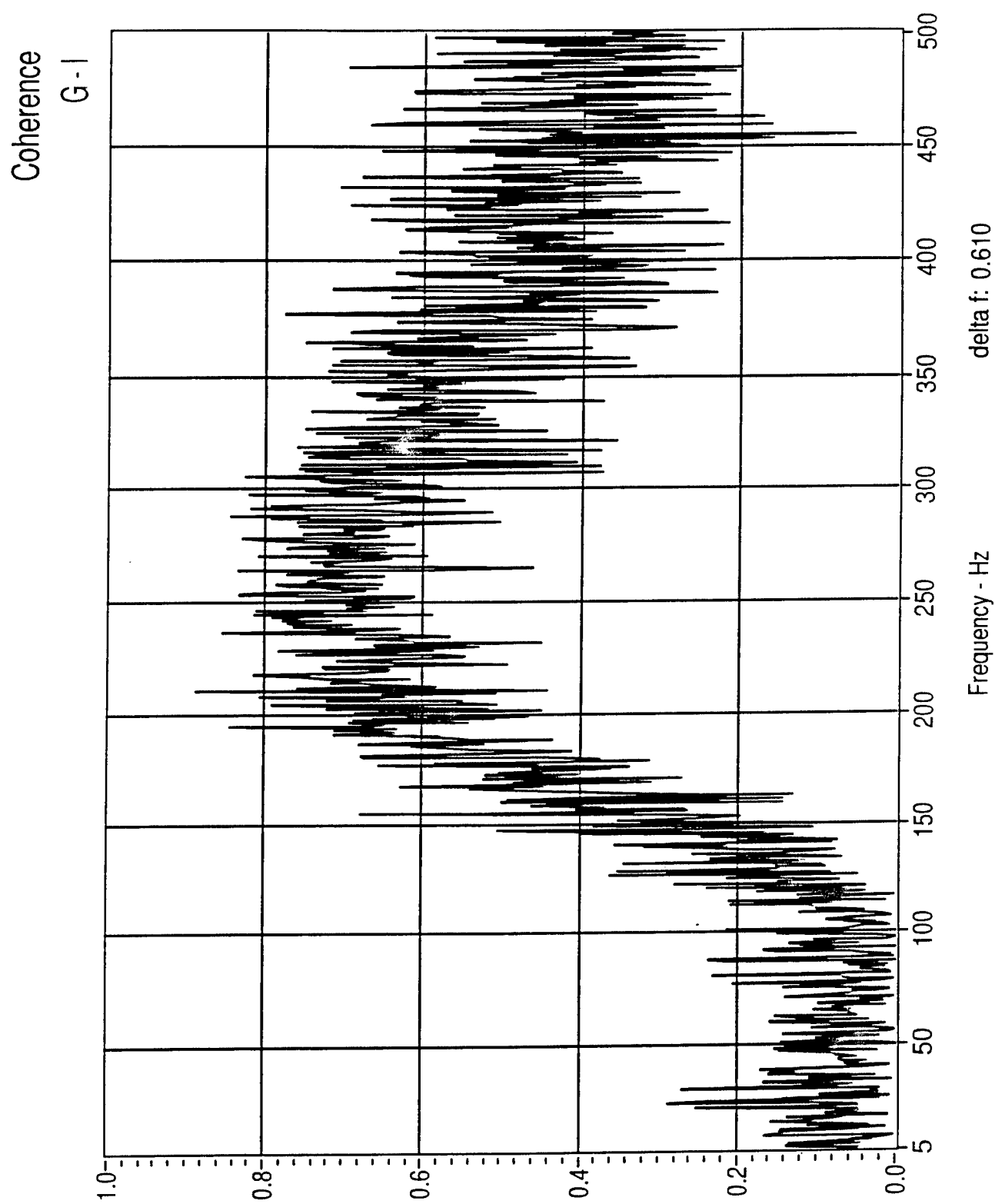
F-15 TPN\_3036: alpha=24 beta=-4 bp=65



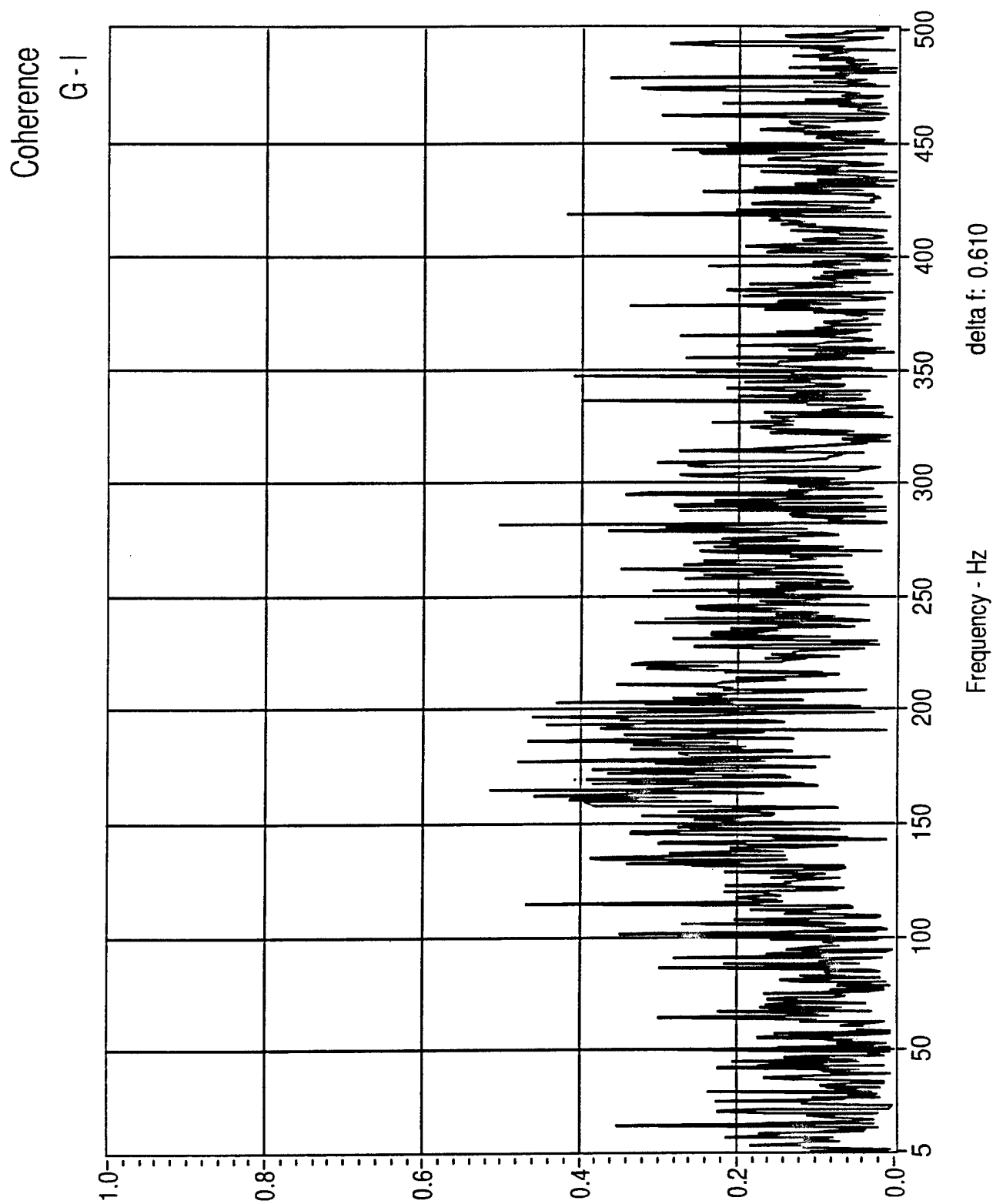
F-15 TPN\_2918: alpha=8 beta=4 bp=0



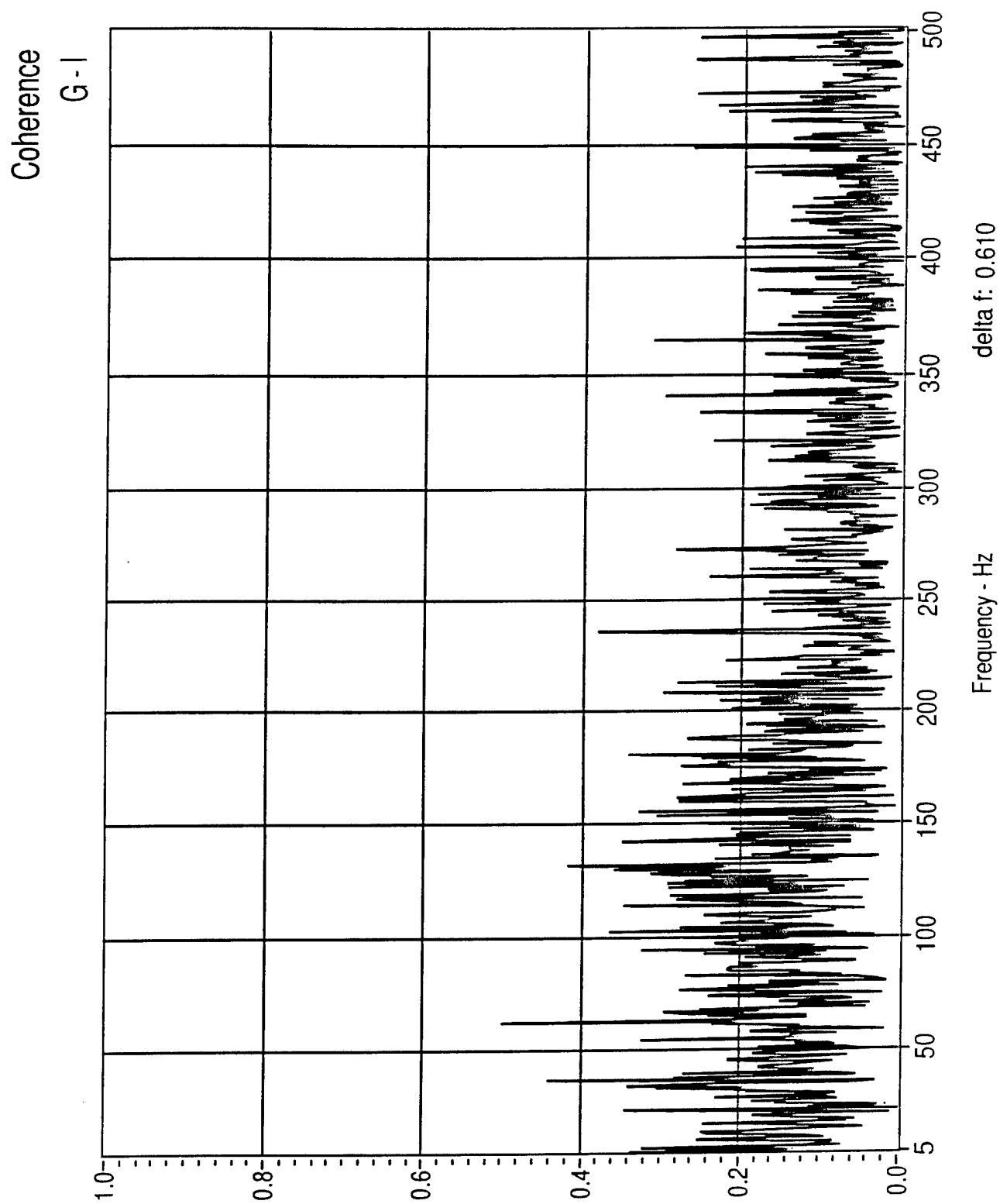
F-15 TPN\_2924: alpha=20 beta=4 bp=0



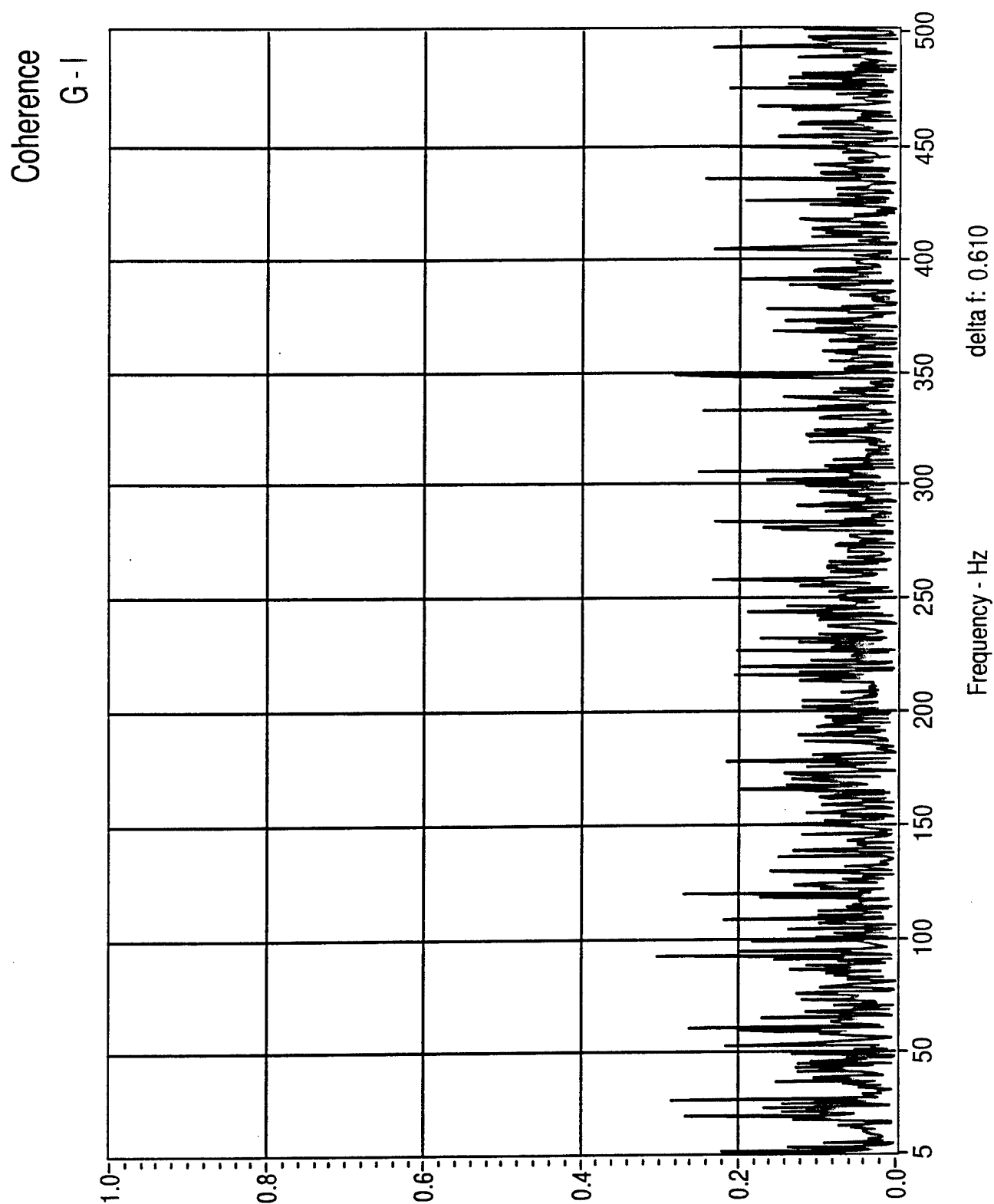
F-15 TPN\_2926: alpha=24 beta=4 bp=0



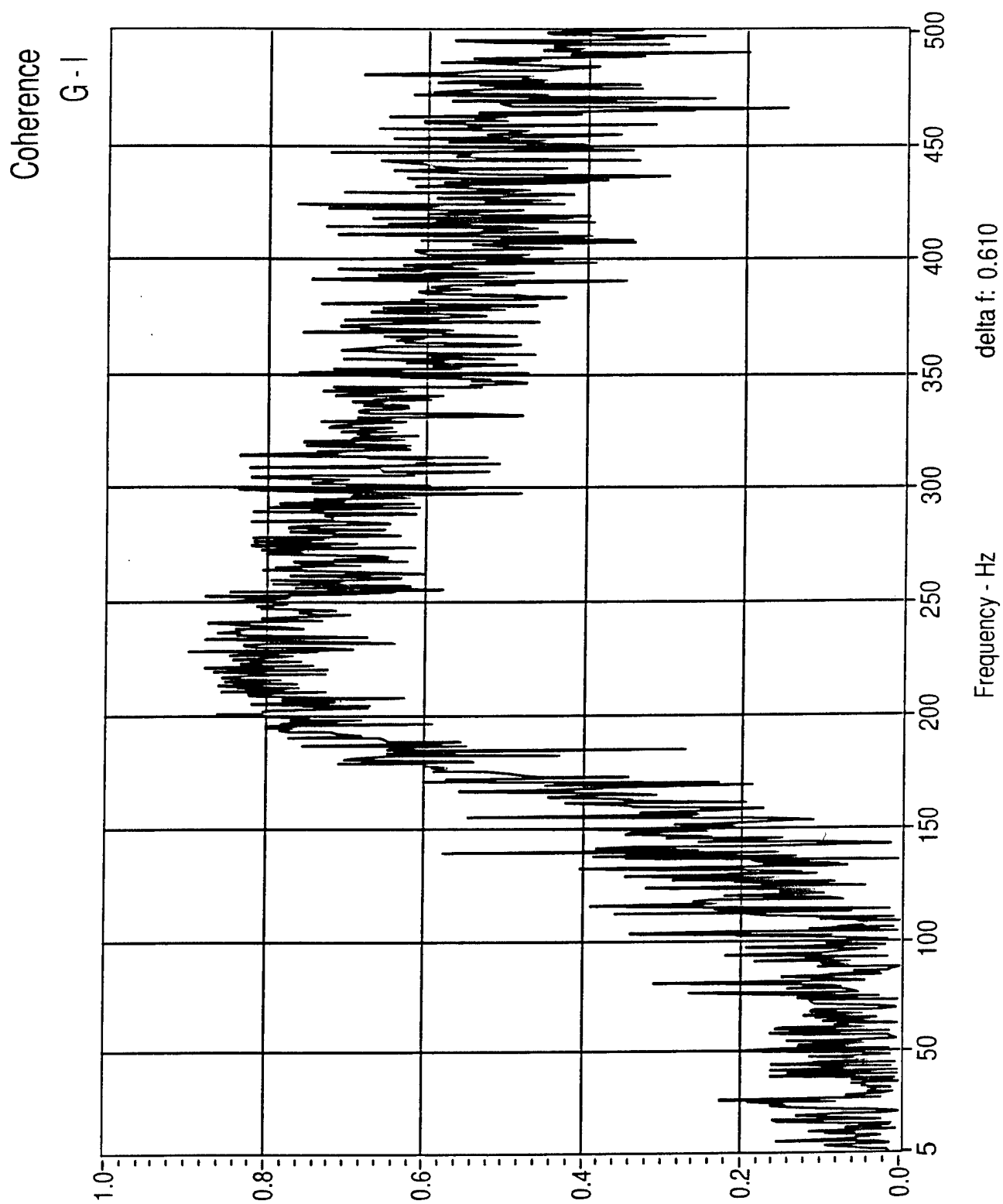
F-15 TPN\_2928: alpha=32 beta=4 bp=0



F-15 TPN\_2844:  $\alpha=8$   $\beta=0$   $\text{bp}=0$

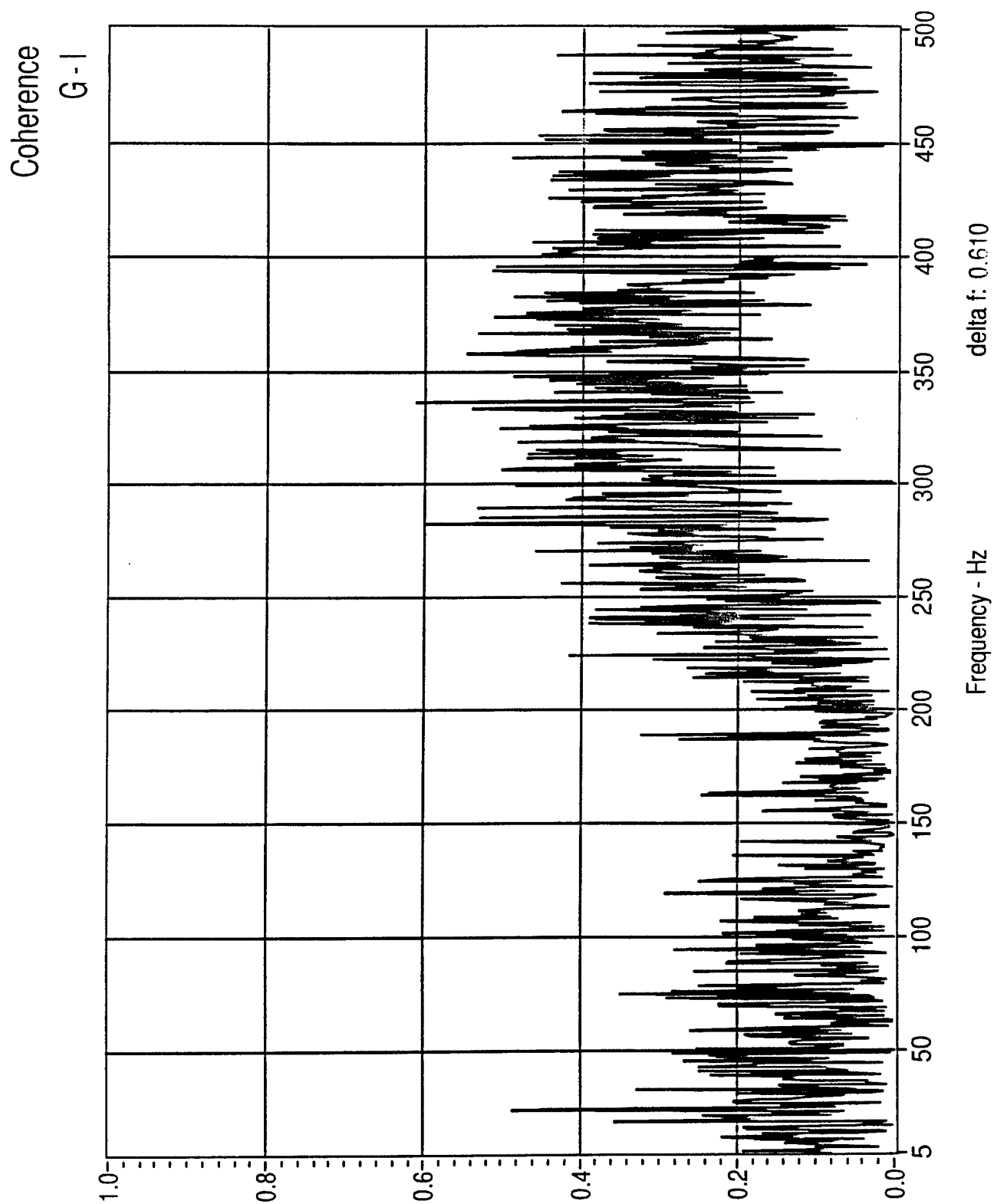


F-15 TPN\_2850: alpha=20 beta=0 bp=0

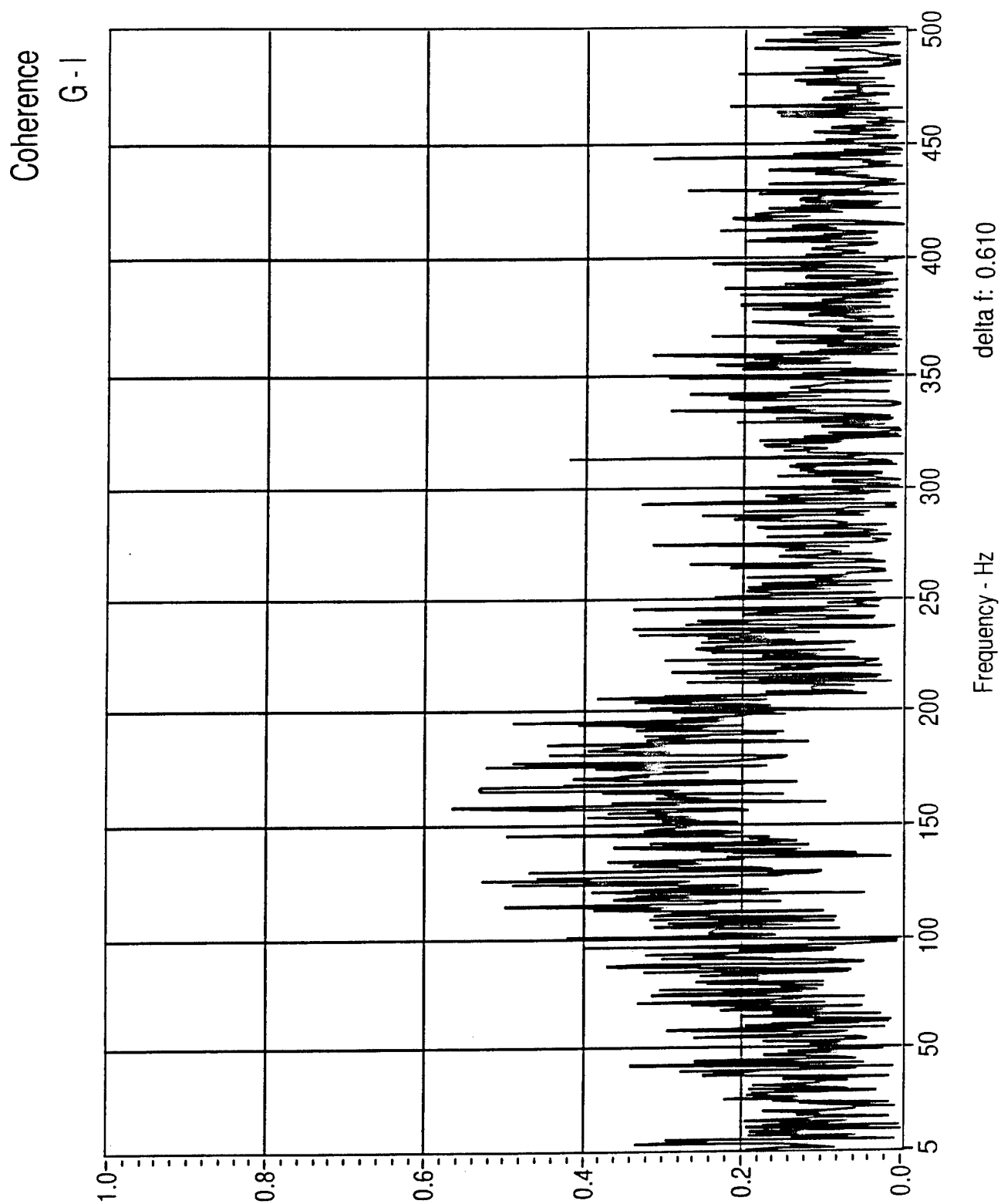




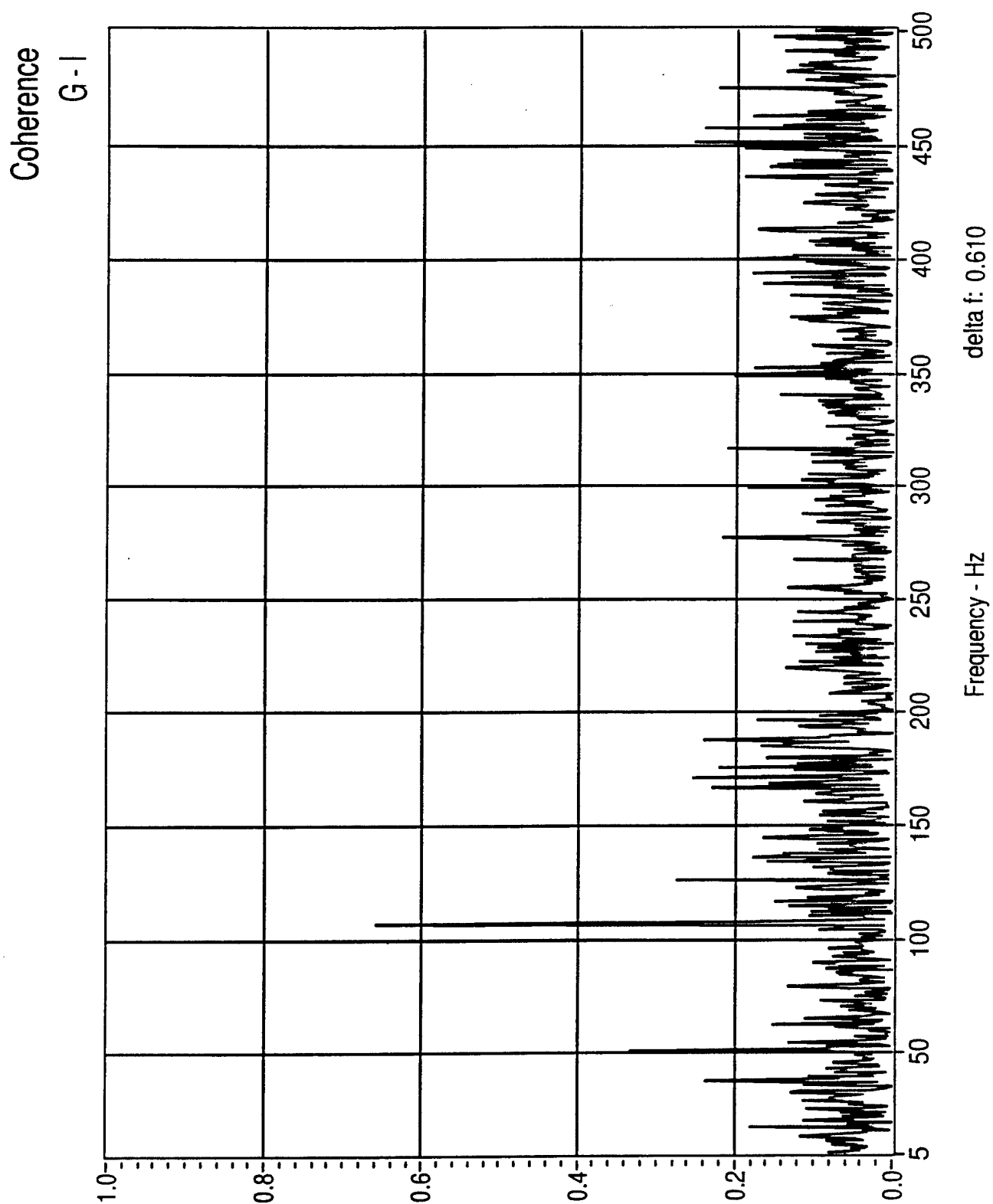
F-15 TPN\_2852: alpha=24 beta=0 bp=0



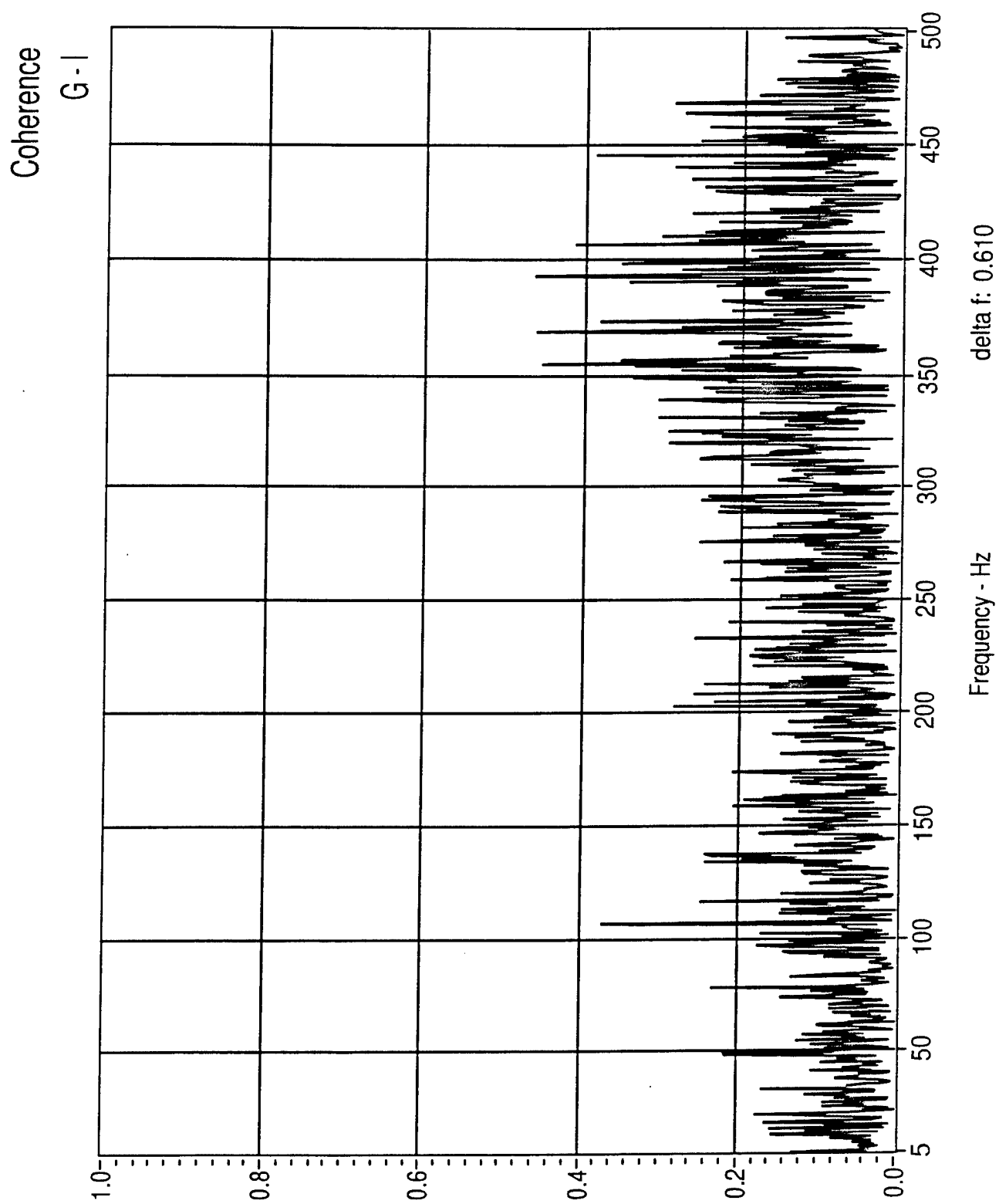
F-15 TPN\_2854: alpha=32 beta=0 bp=0



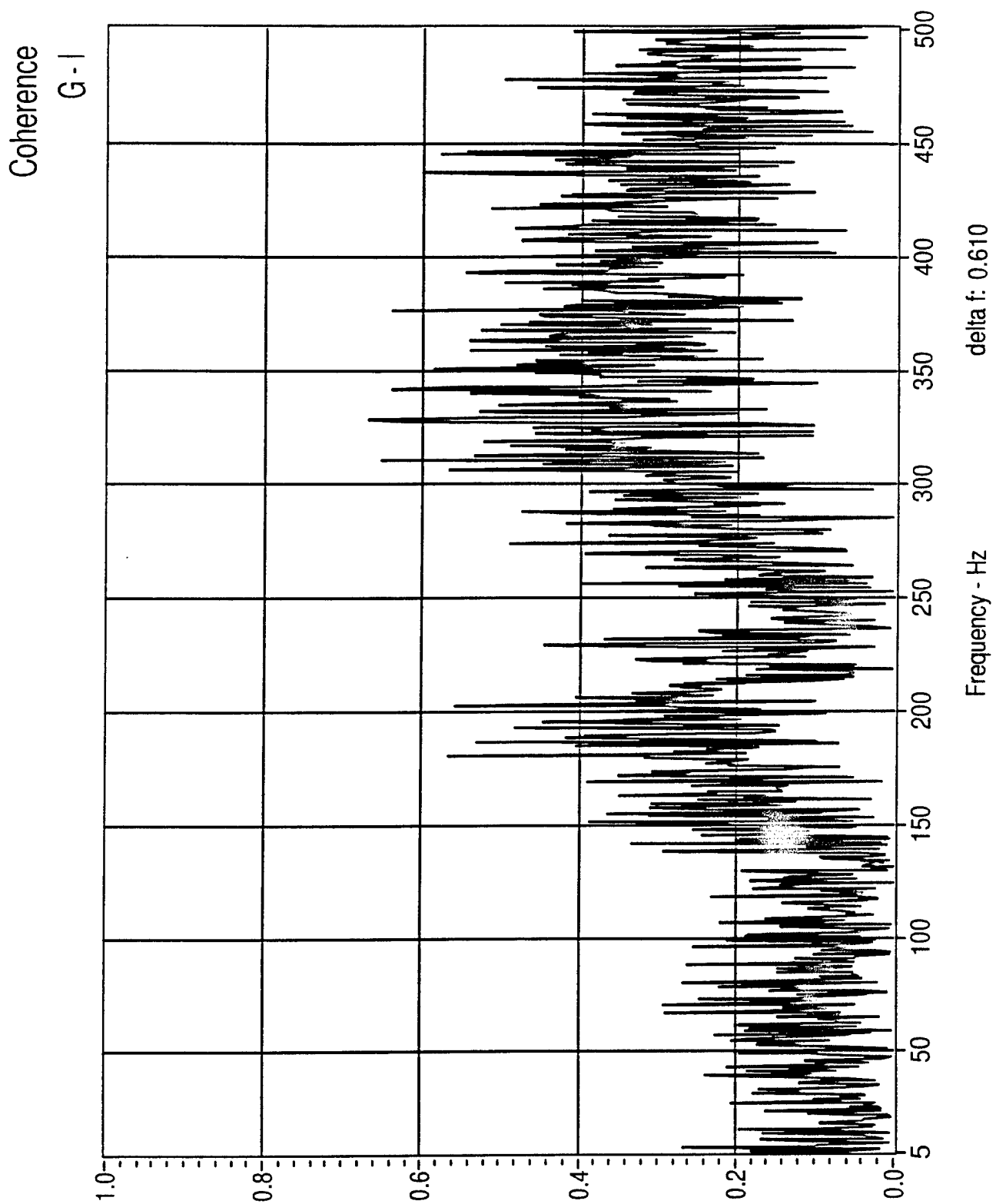
F-15 TPN\_2864: alpha=8 beta=-4 bp=0



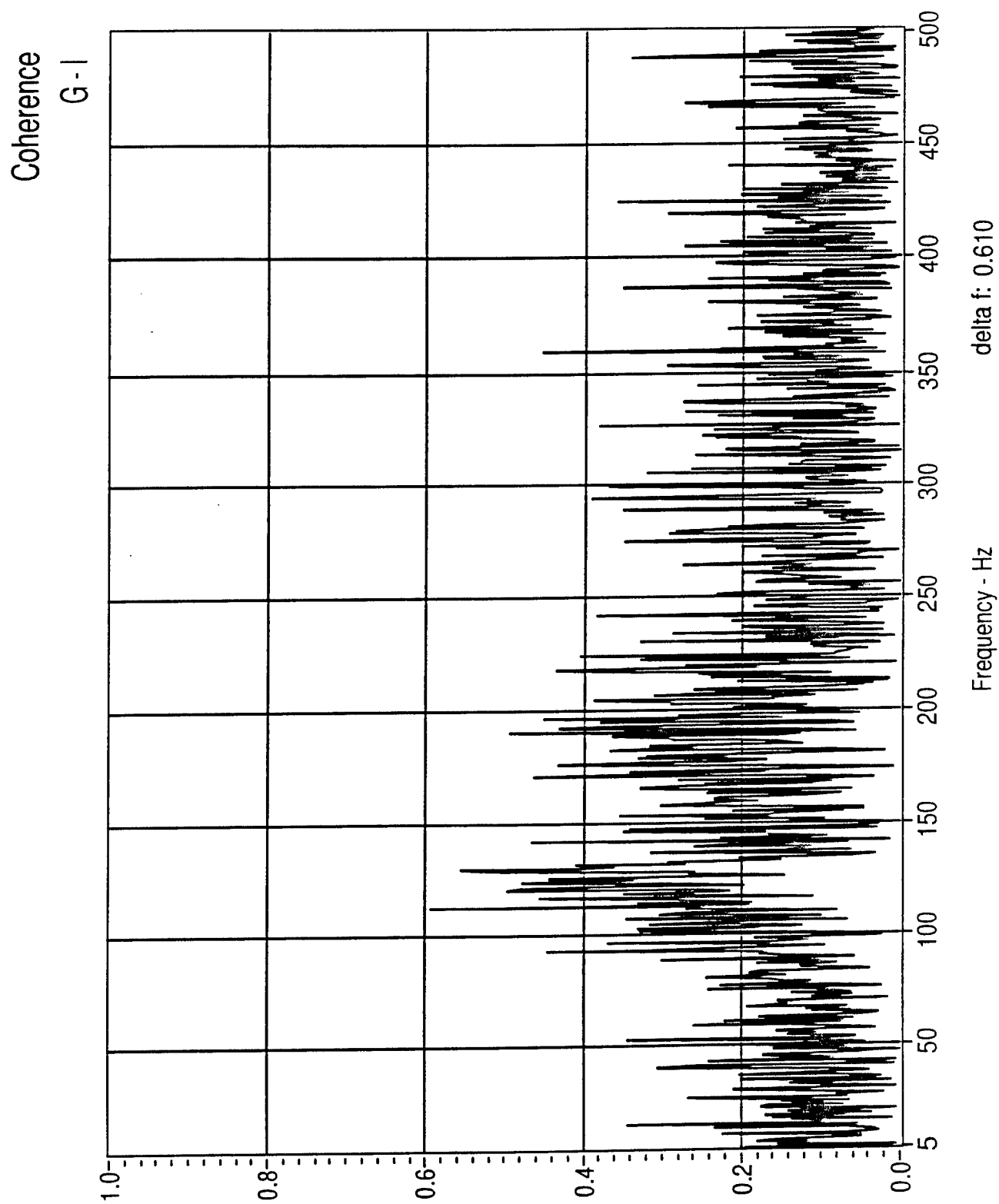
F-15 TPN\_2870:  $\alpha=20$   $\beta=-4$   $\text{bp}=0$



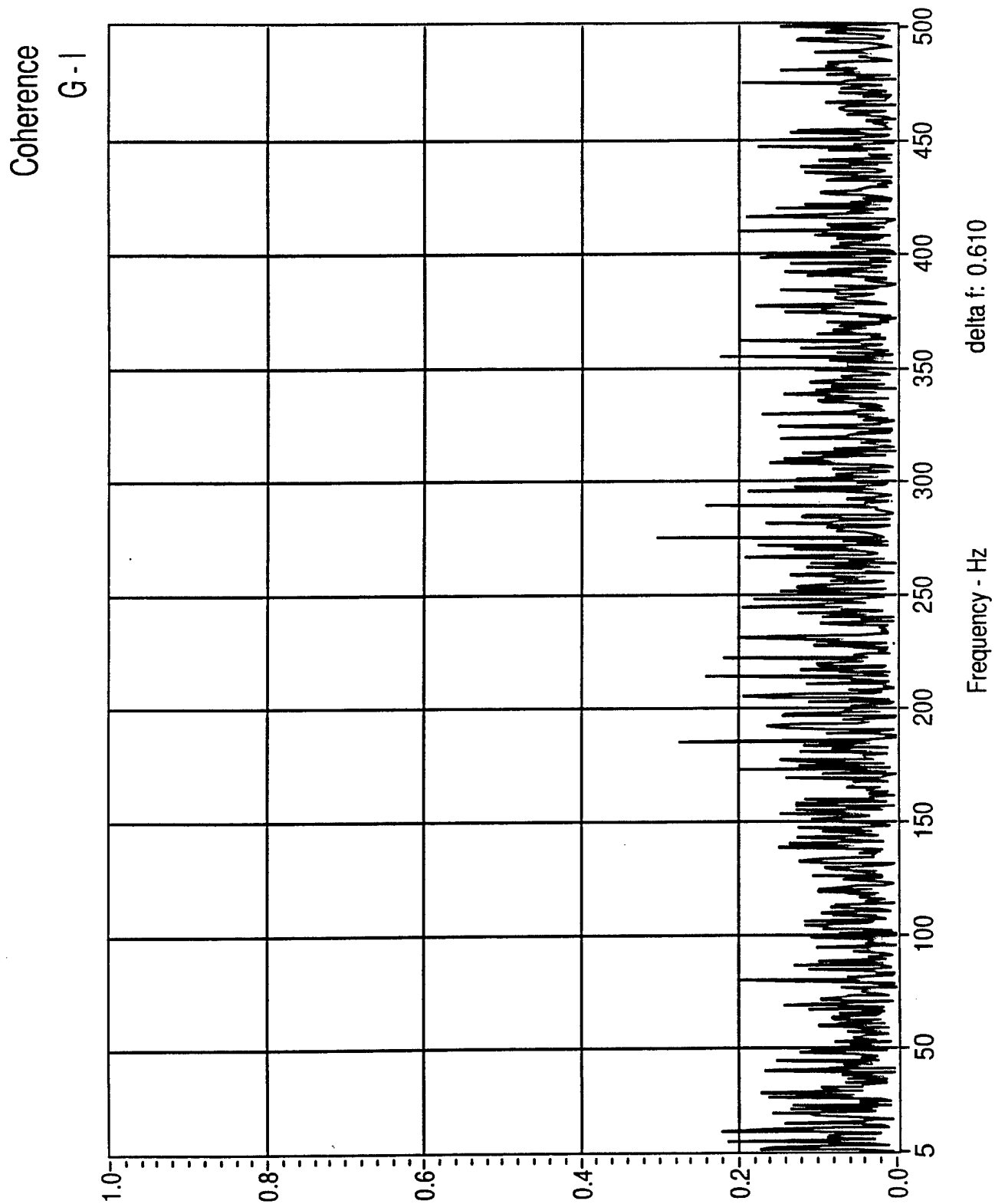
F-15 TPN\_2872: alpha=24 beta=-4 bp=0



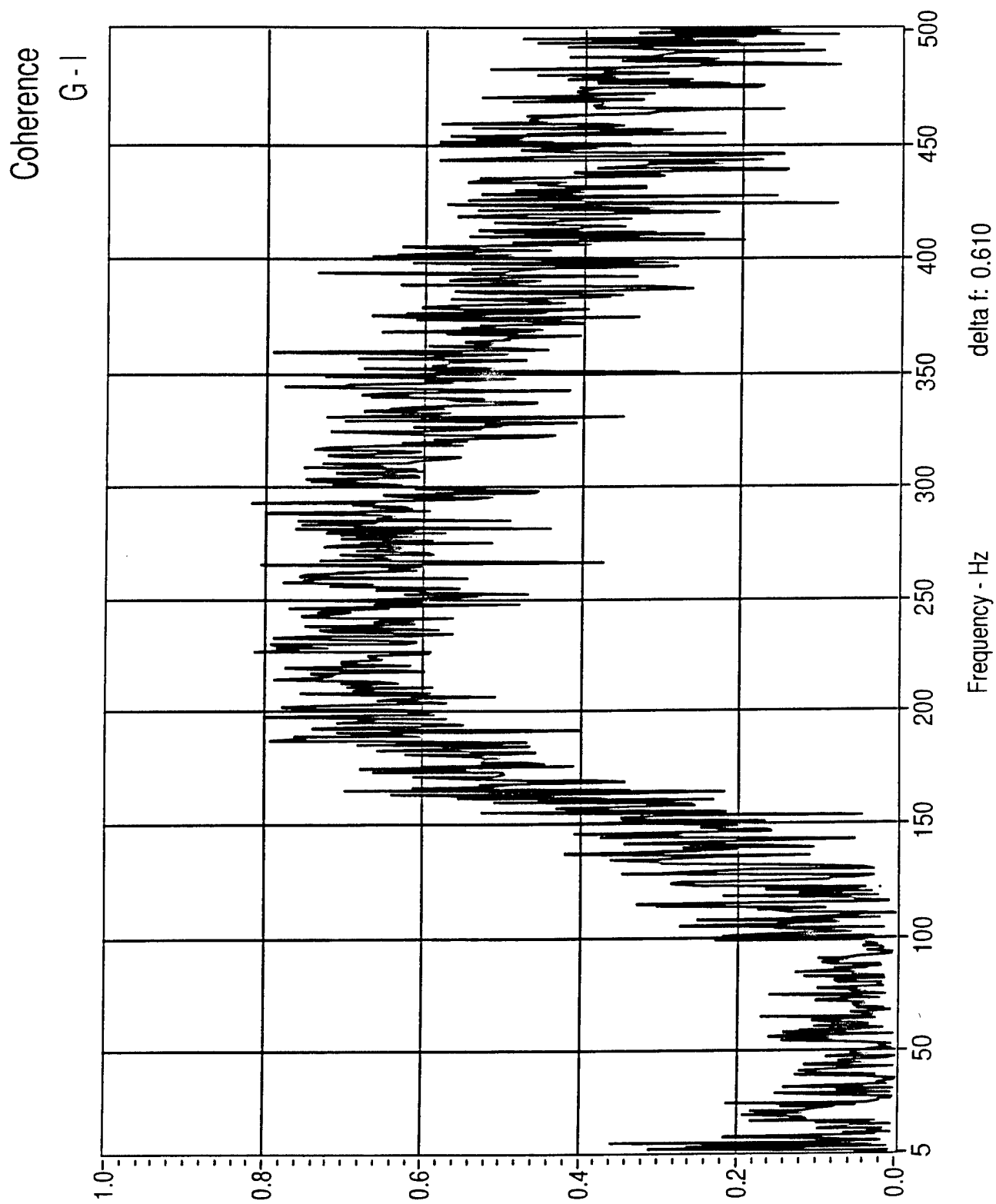
F-15 TPN\_2874: alpha=32 beta=-4 bp=0



F-15 TPN\_3351: alpha=8 beta=4 bp=45



F-15 TPN\_3357: alpha=20 beta=4 bp=45

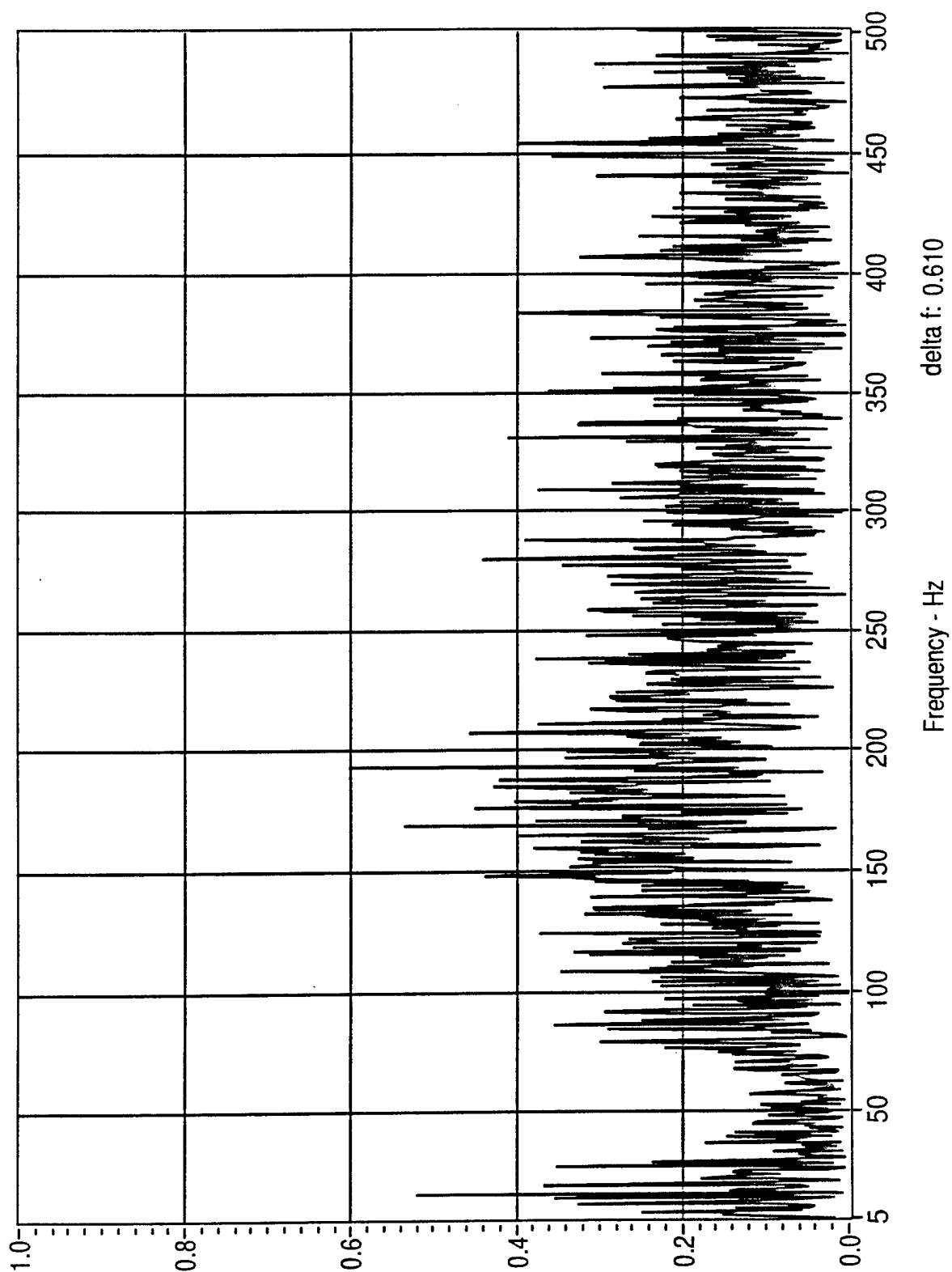




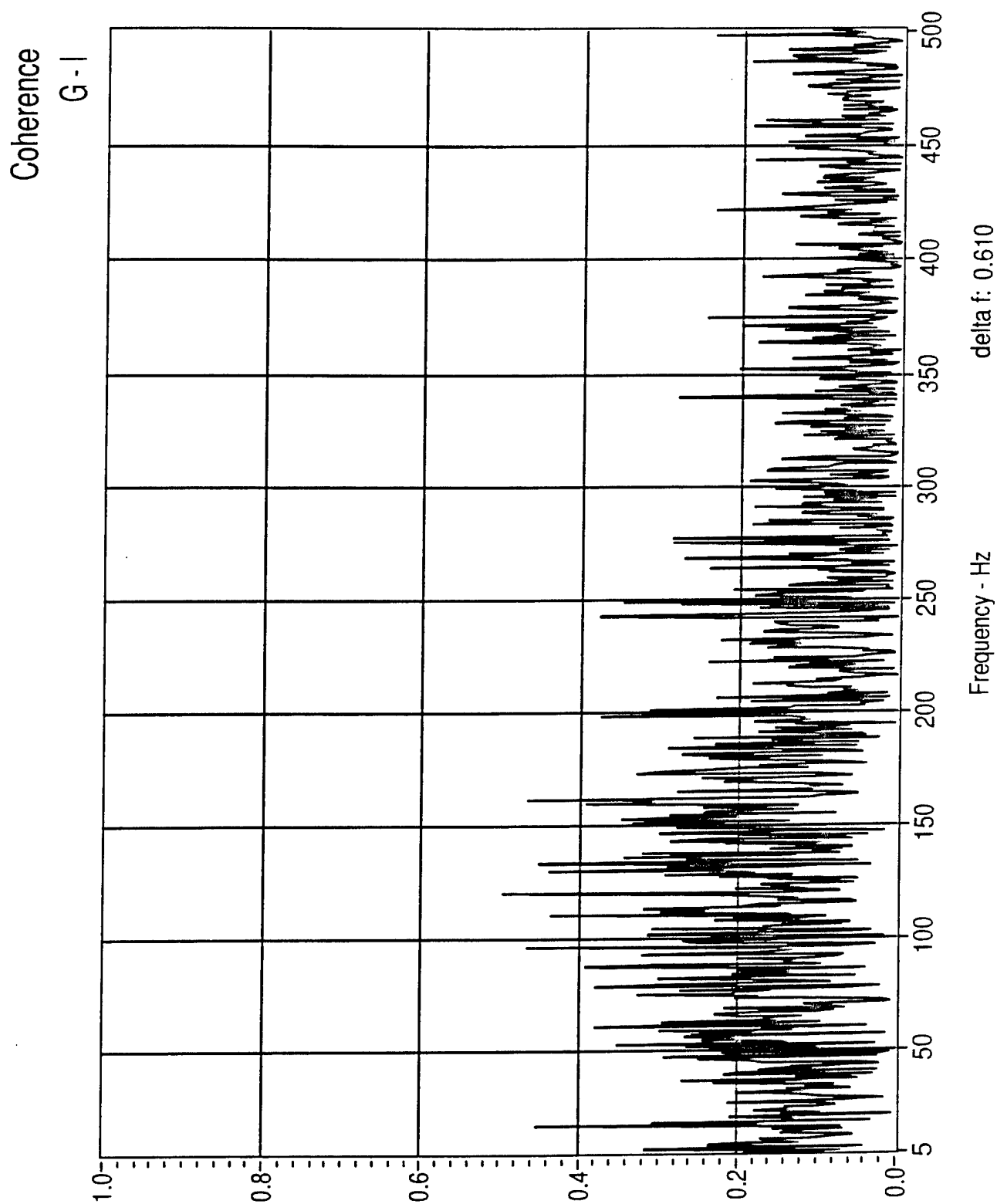
F-15 TPN\_3359: alpha=24 beta=4 bp=45

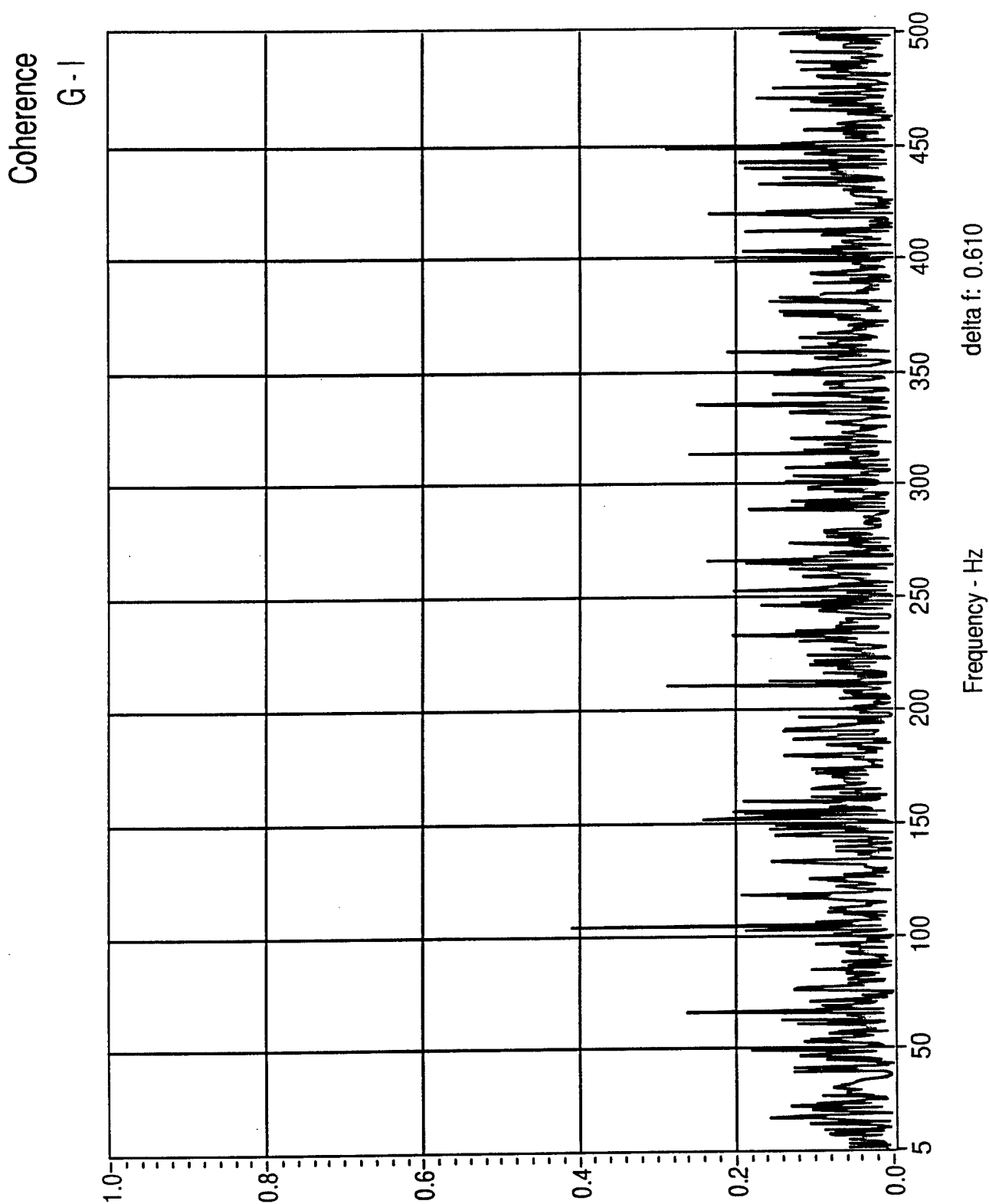
Coherence

G-I

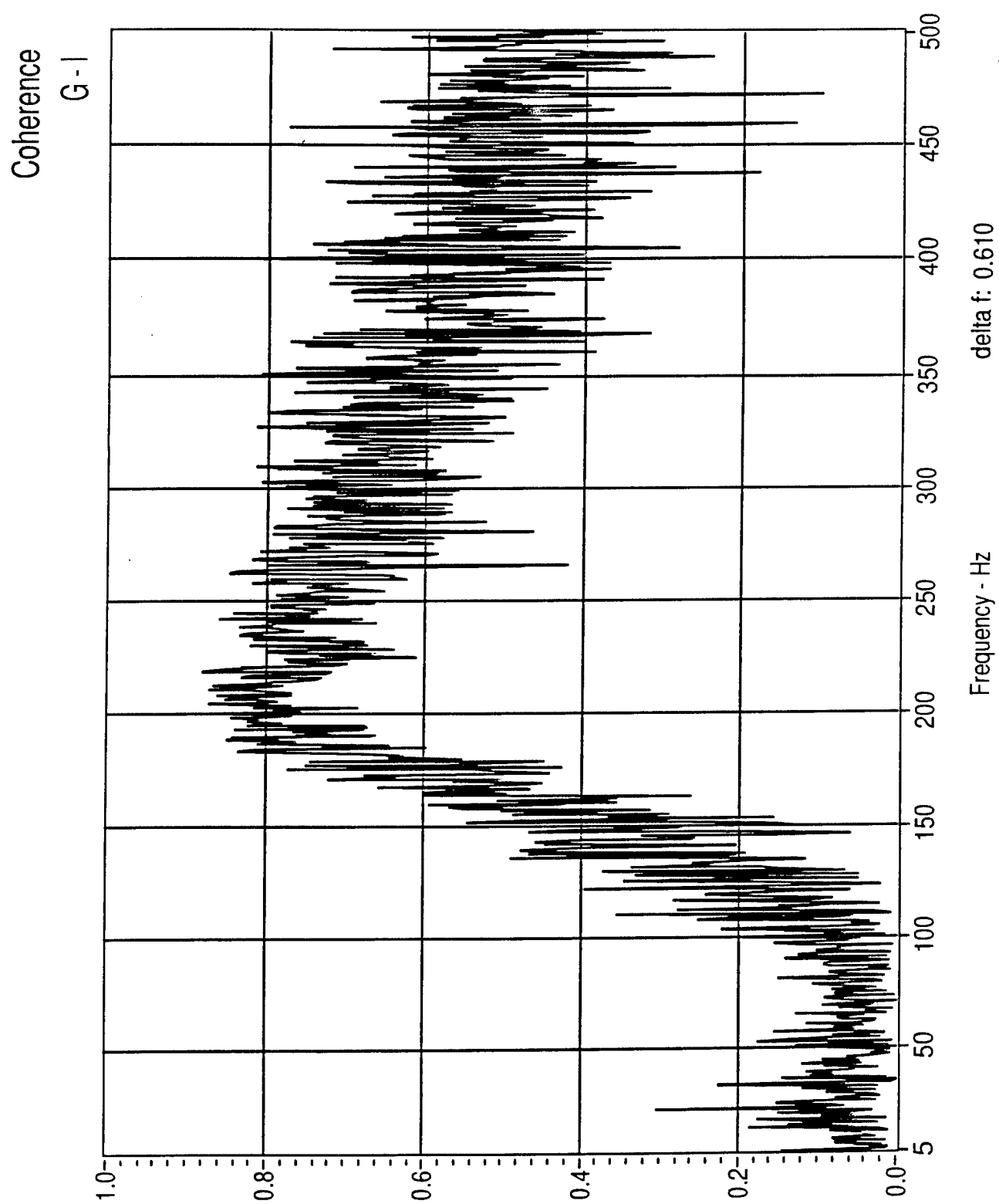


F-15 TPN\_3361: alpha=32 beta=4 bp=45

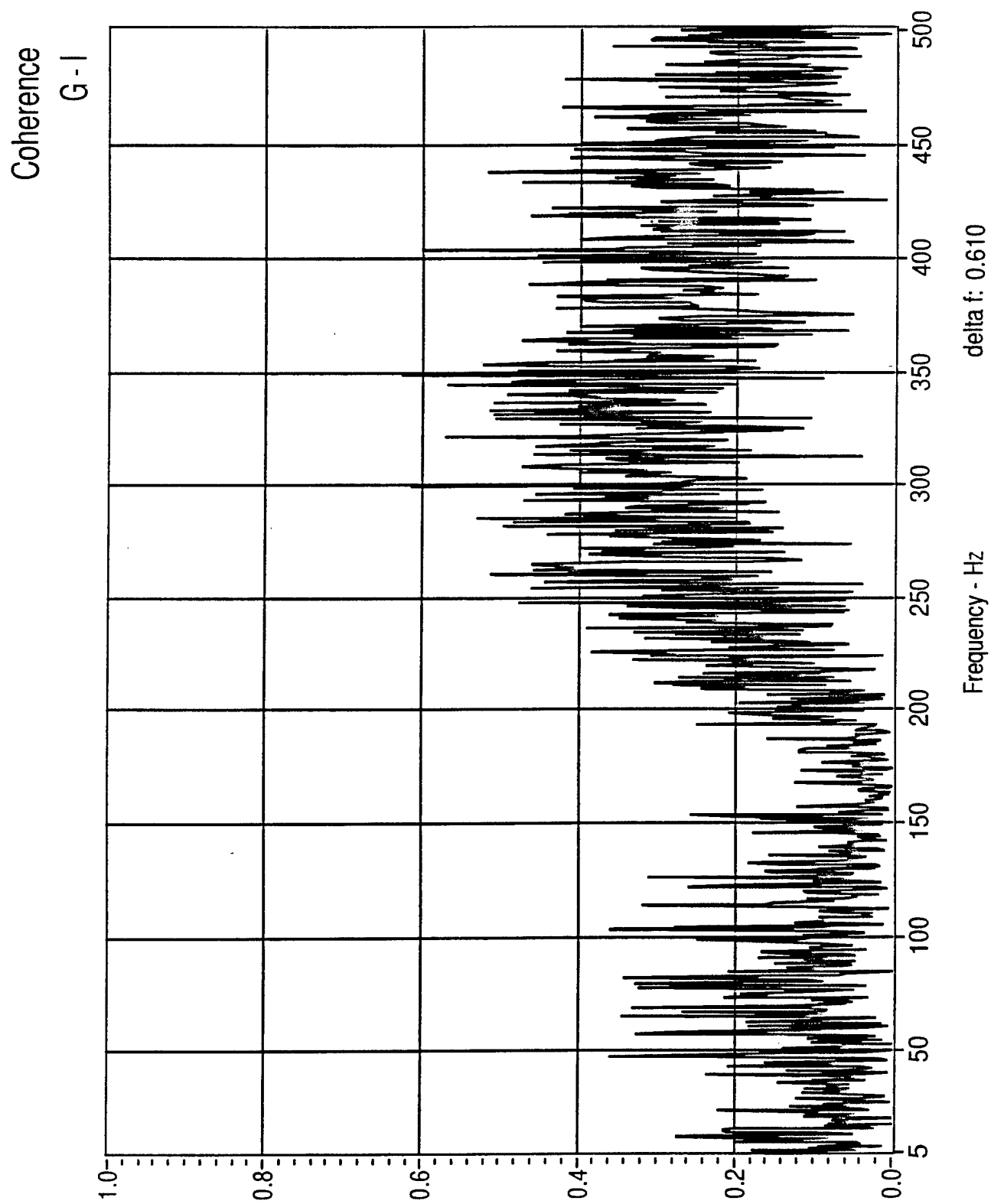




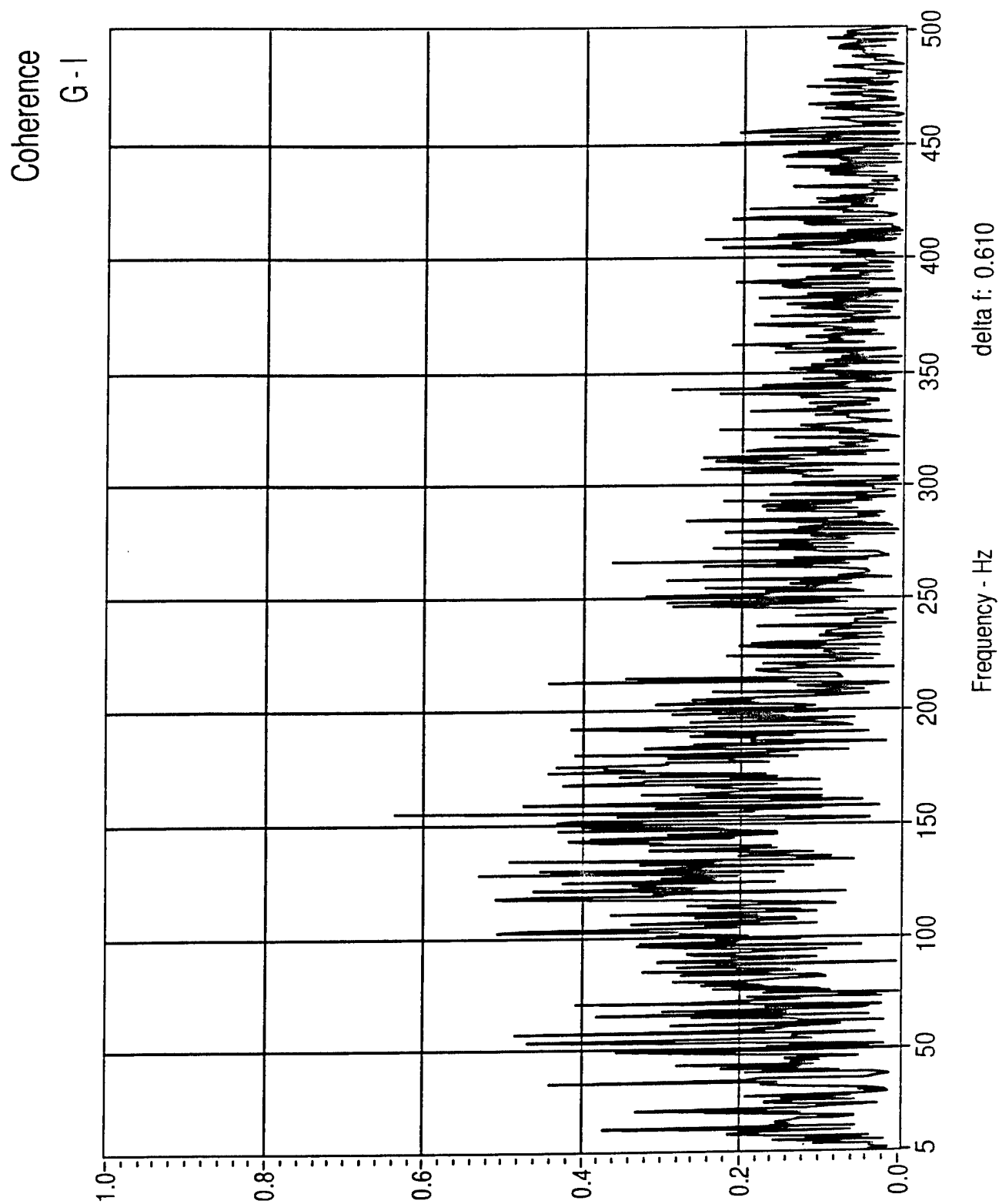
F-15 TPN\_3339: alpha=20 beta=0 bp=45



F-15 TPN\_3341: alpha=24 beta=0 bp=45



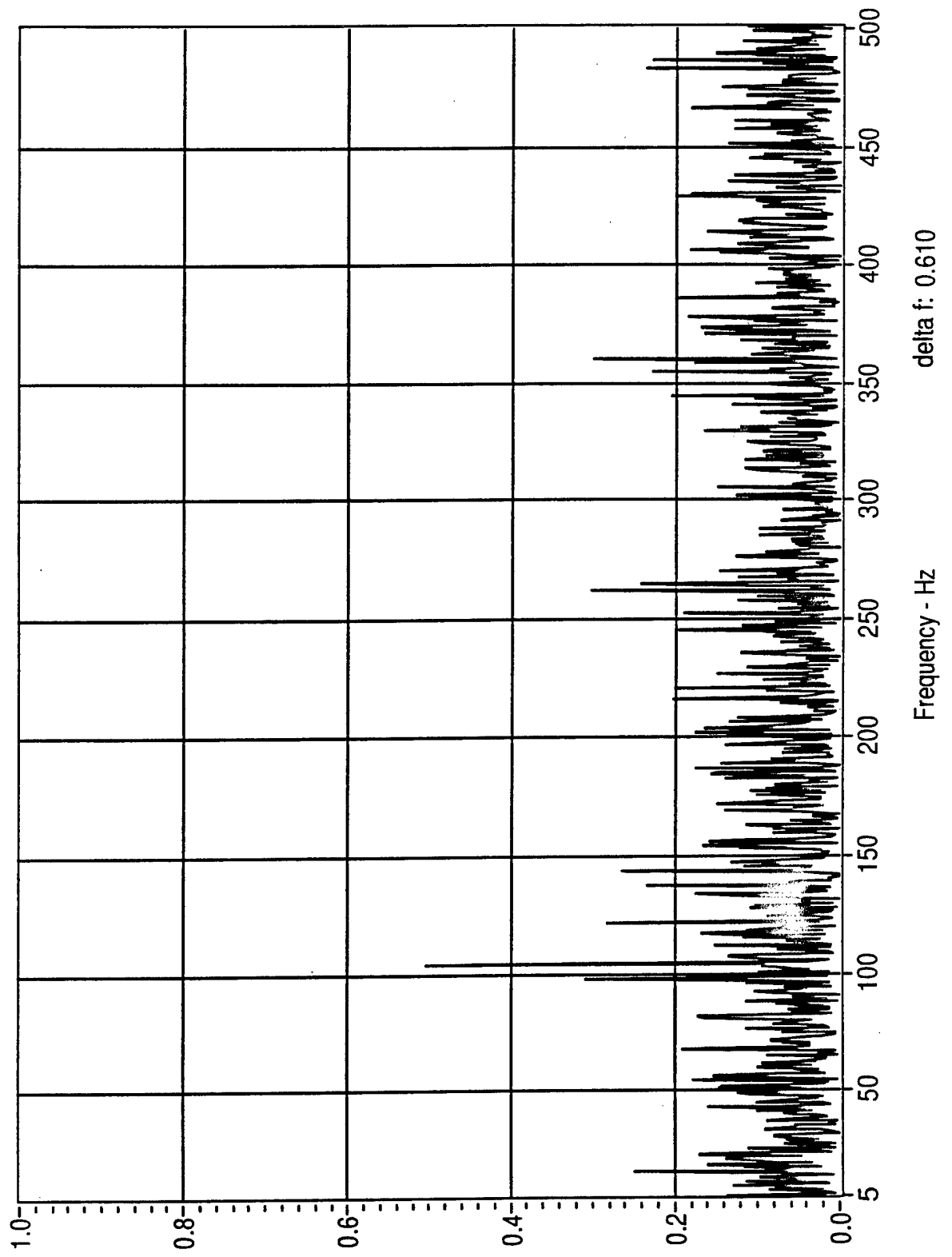
F-15 TPN\_3343: alpha=32 beta=0 bp=45



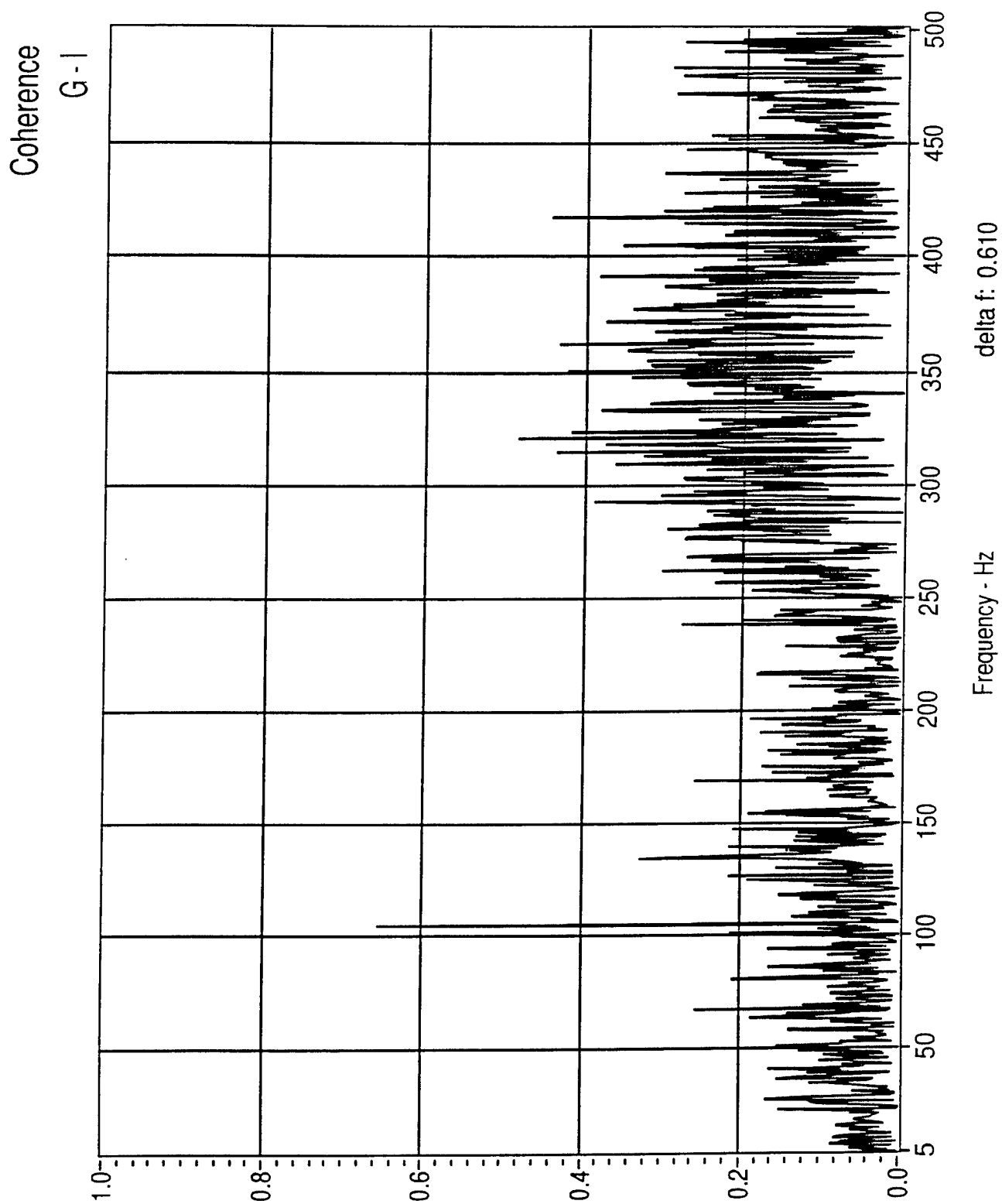
F-15 TPN\_3369: alpha=8 beta=-4 bp=45

Coherence

G - I

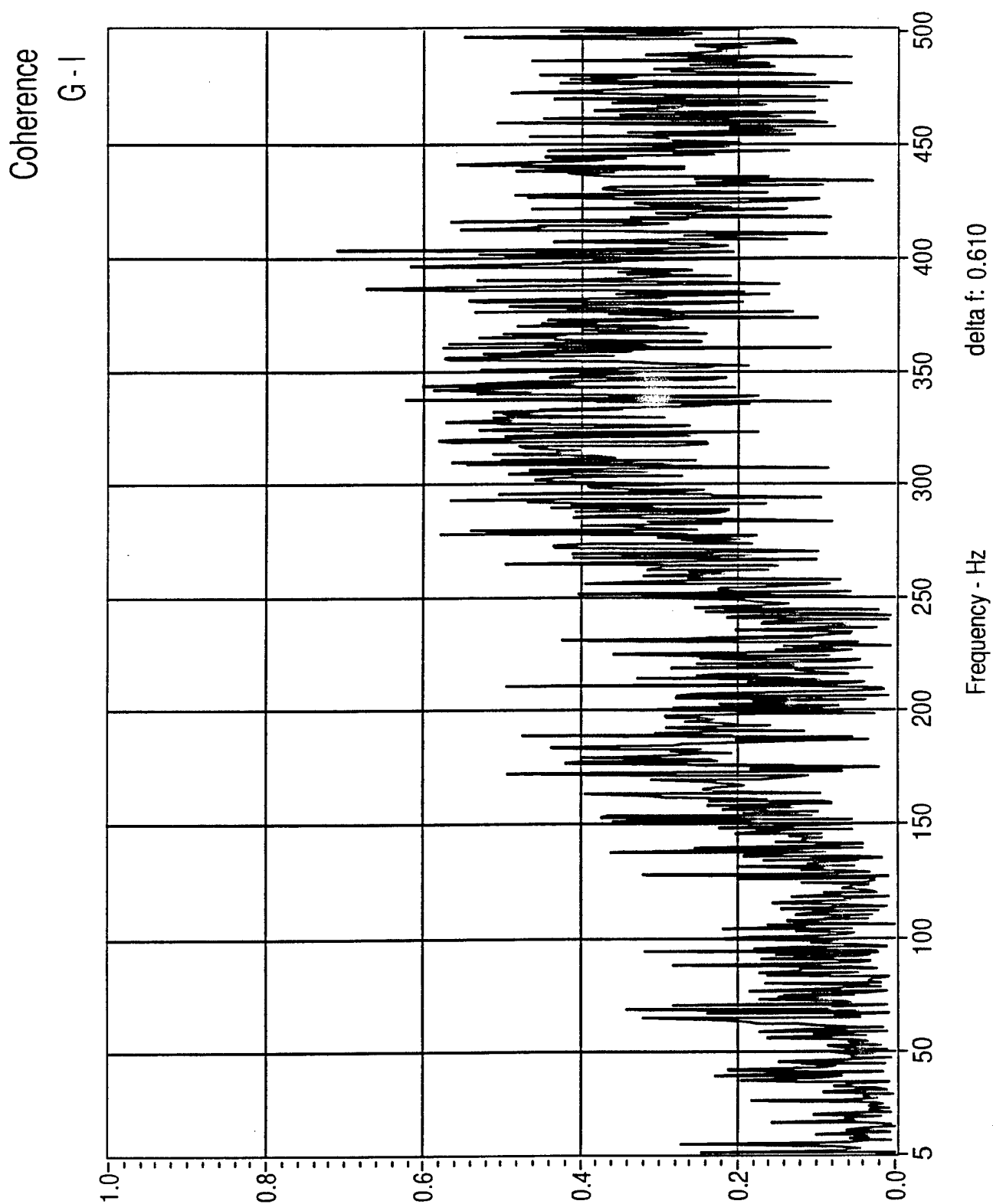


F-15 TPN\_3375: alpha=20 beta=-4 bp=45

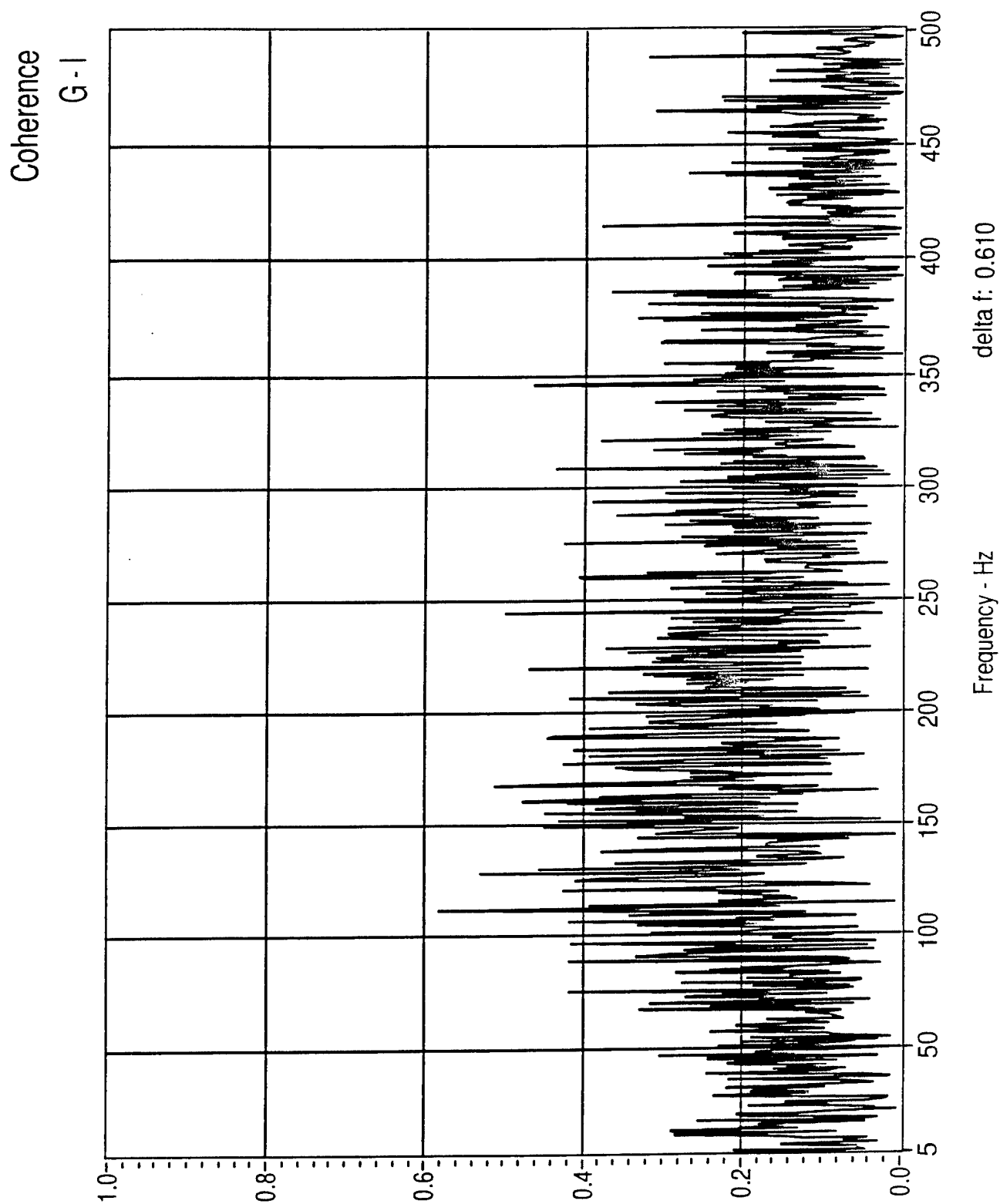




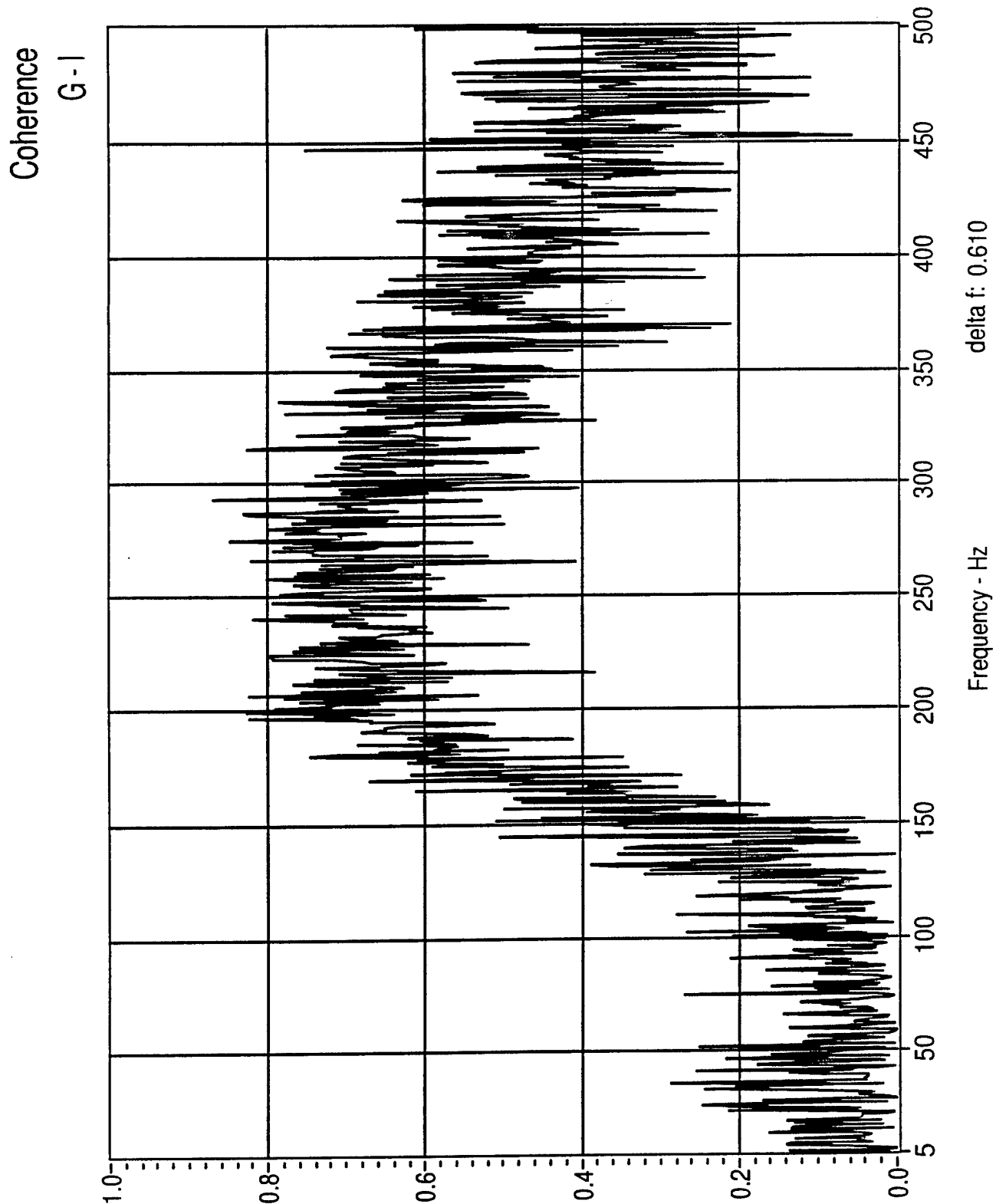
F-15 TPN\_3377: alpha=24 beta=-4 bp=45



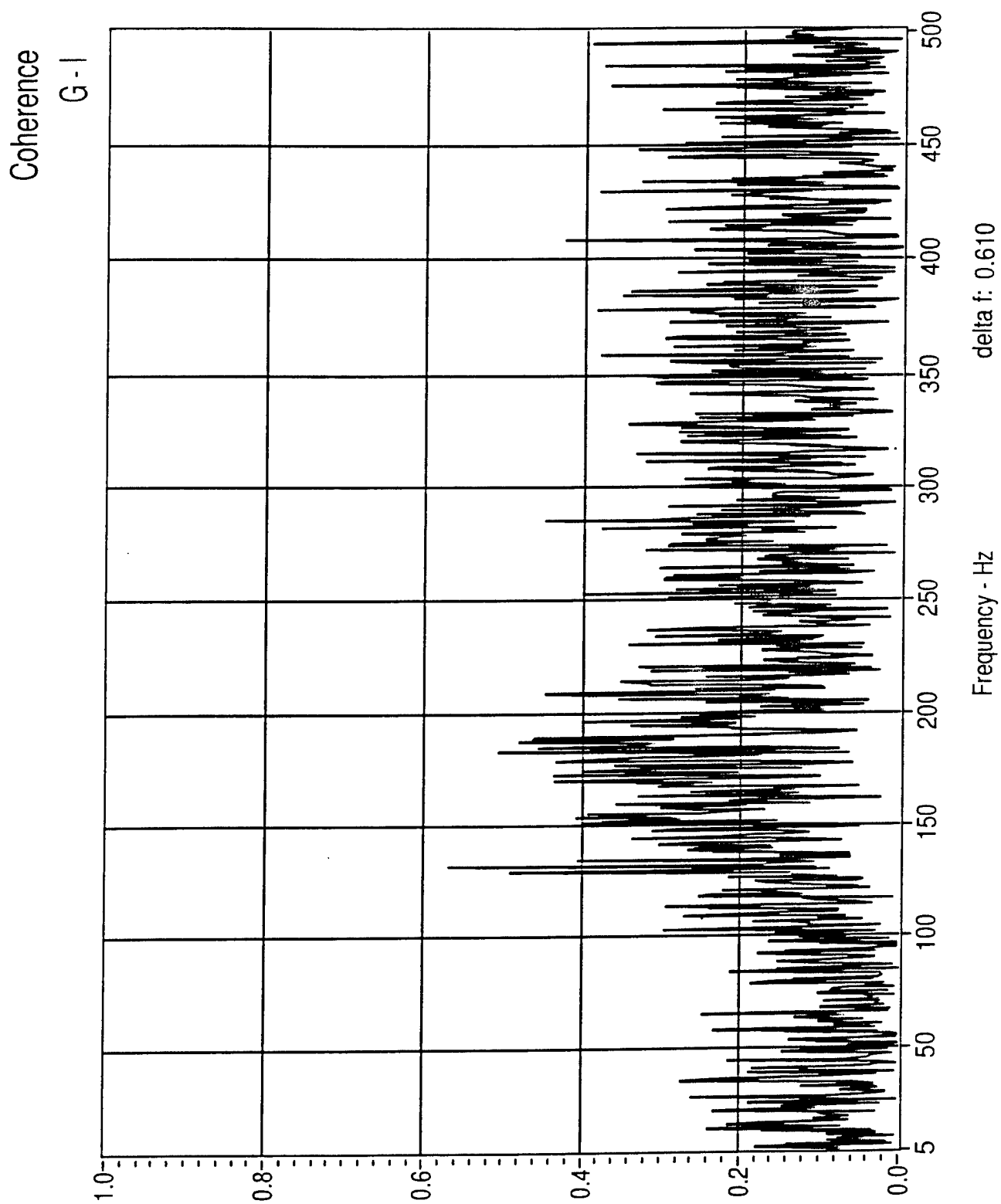
F-15 TPN\_3379: alpha=32 beta=-4 bp=45



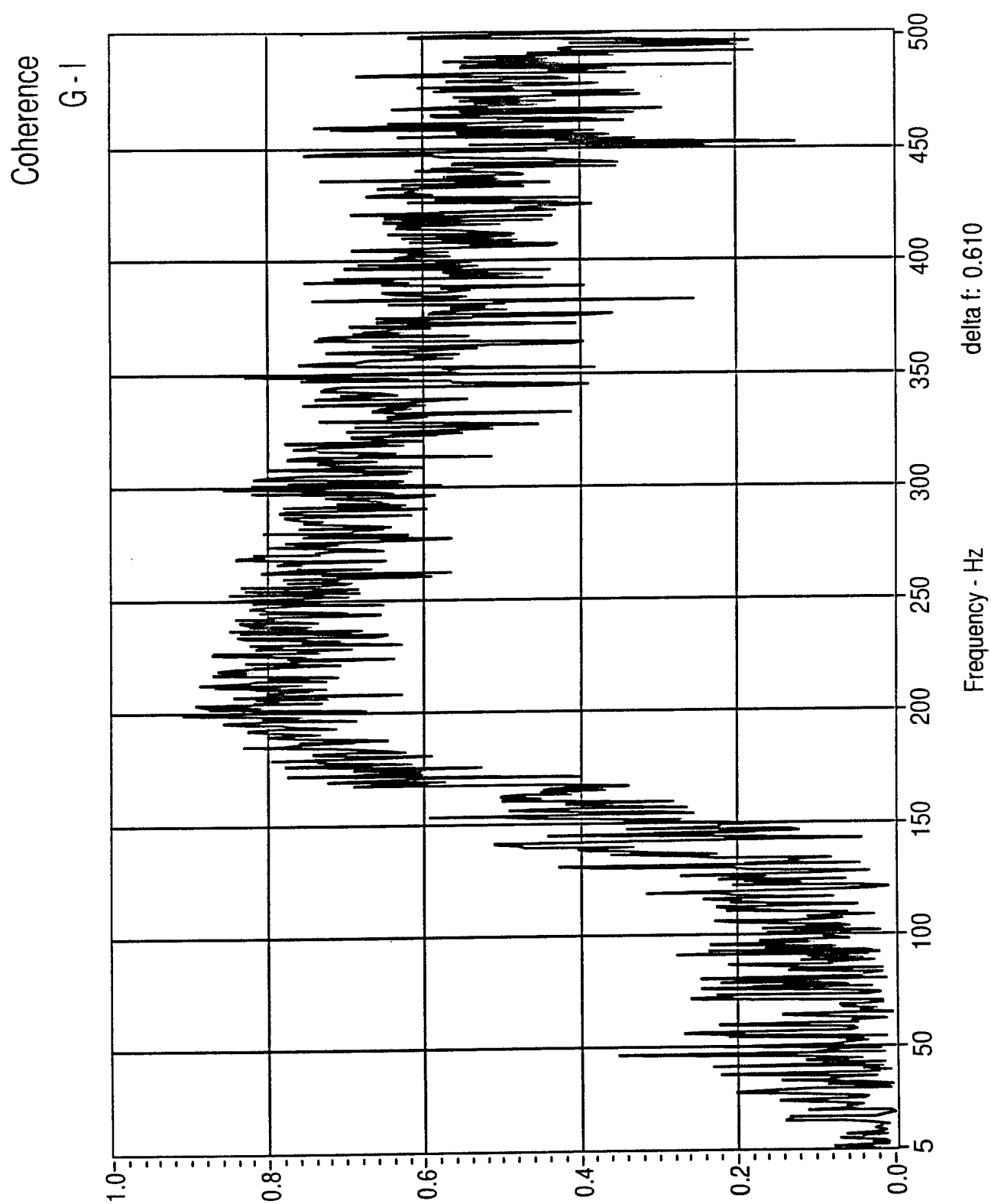
F-15 TPN\_3046: alpha=20 beta=4 bp=65

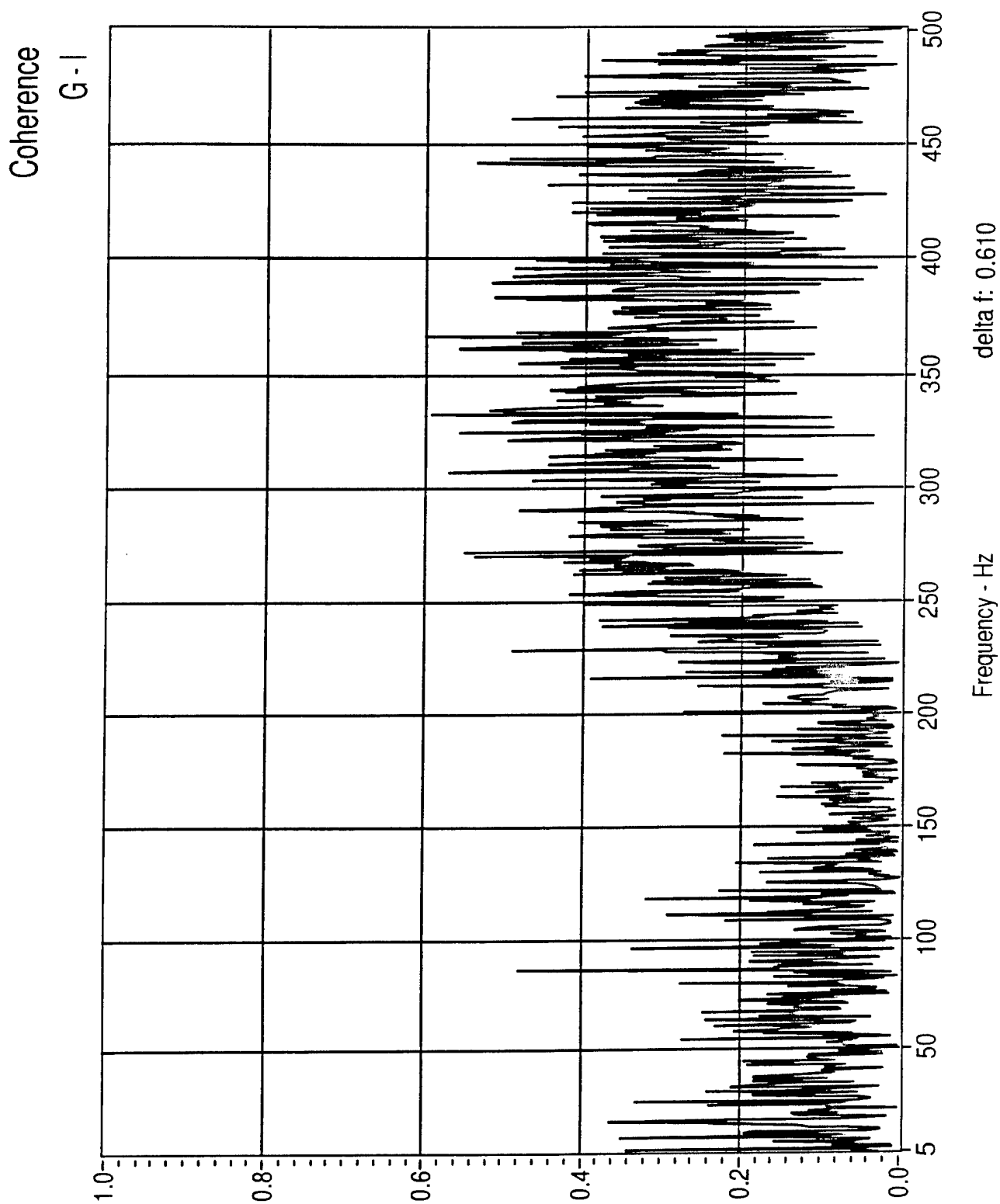


F-15 TPN\_3048: alpha=24 beta=4 bp=65

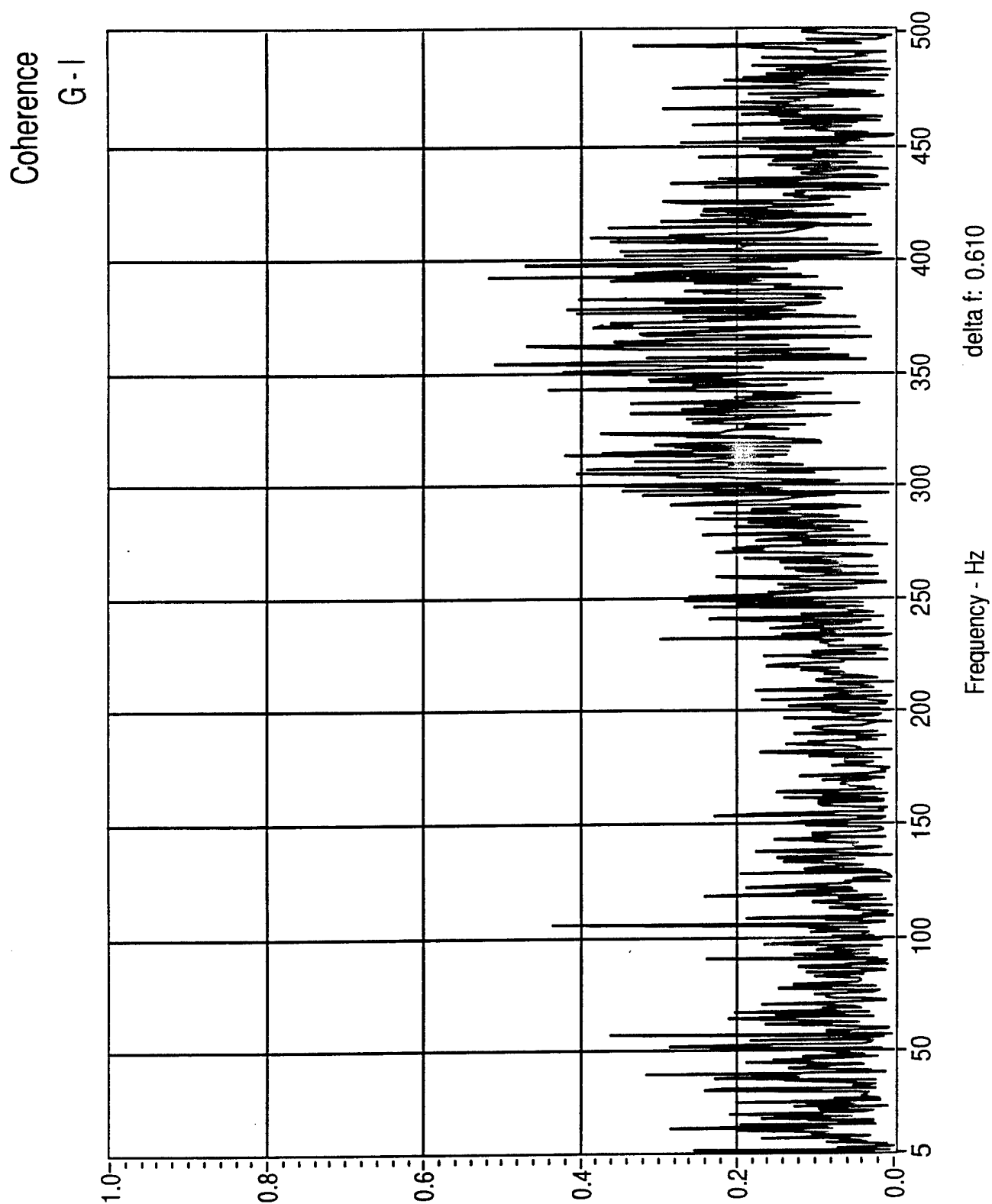


F-15 TPN\_3040: alpha=20 beta=0 bp=65

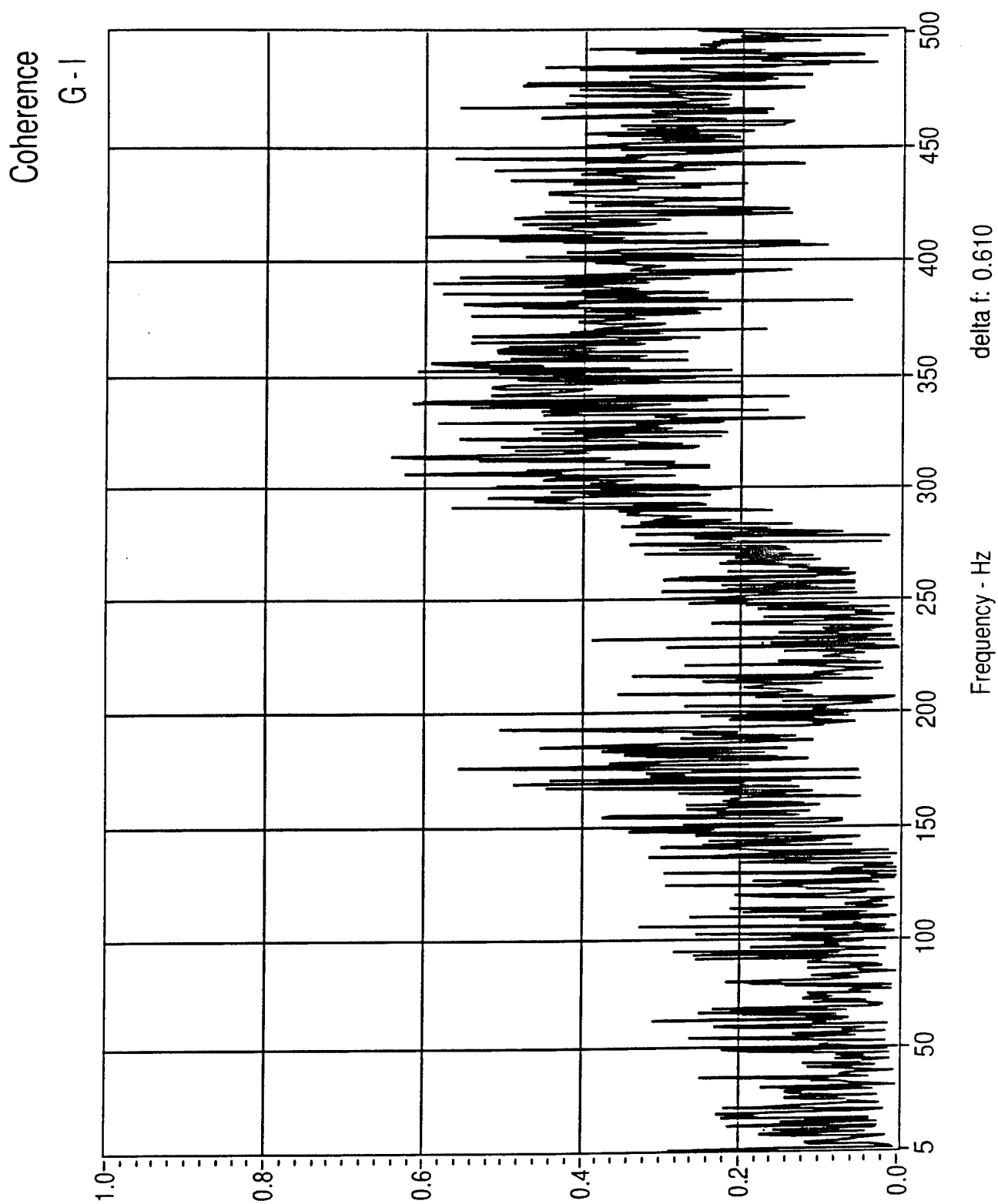




F-15 TPN\_3034: alpha=20 beta=-4 bp=65



F-15 TPN\_3036: alpha=24 beta=-4 bp=65





## NONDIMENSIONAL PRESSURE COEFFICIENTS

### 3.0 RMS GRAPHS

3.1  $Q = 56 \text{ PSF}$

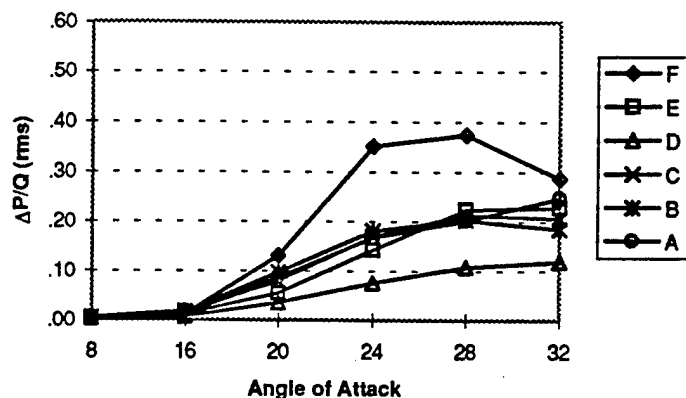
3.2  $Q = 30 \text{ PSF}$

## **NONDIMENSIONAL PRESSURE COEFFICIENTS**

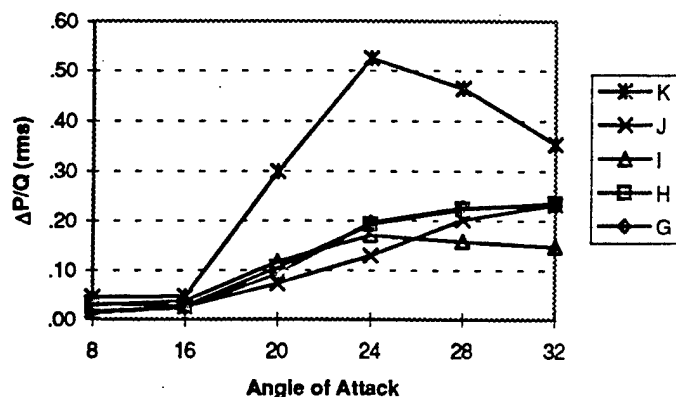
### **3.1 RMS GRAPHS, $Q=56$ PSF**

# F-15 Vertical Tail Buffet Test

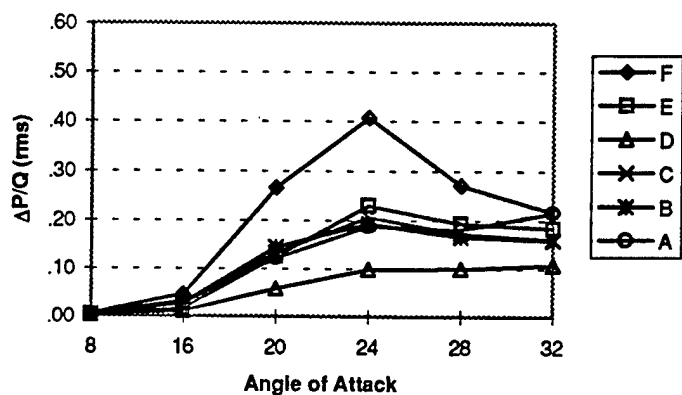
Flex Tail: Q=56 psf, Beta=0  
0 psi blowing @ wing L.E.



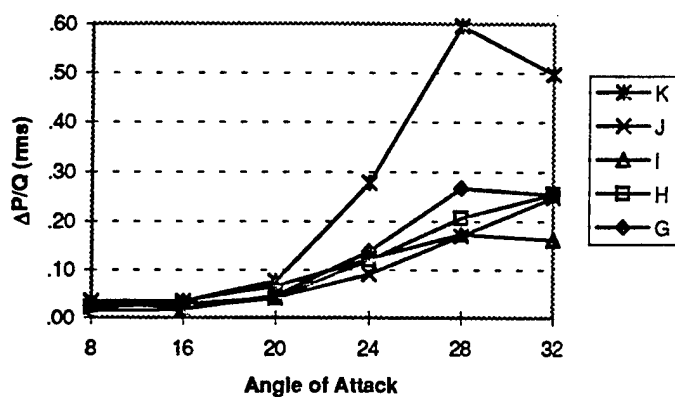
Rigid Tail: Q=56 psf, Beta=0  
0 psi blowing @ wing L.E.



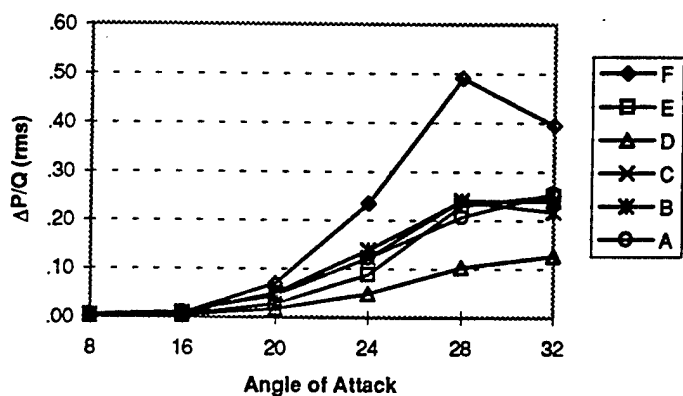
Flex Tail: Q=56 psf, Beta=-4  
0 psi blowing @ wing L.E.



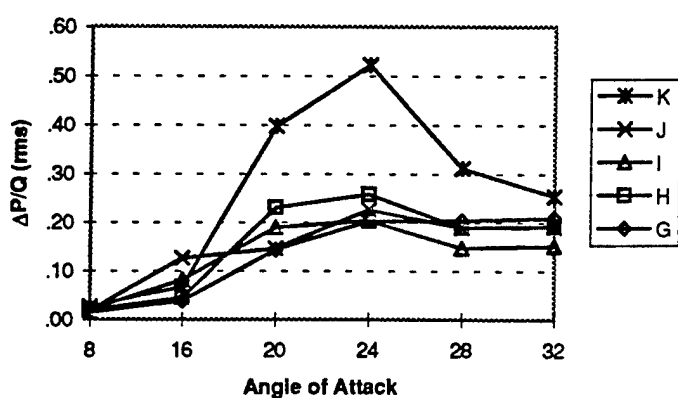
Rigid Tail: Q=56 psf, Beta=-4  
0 psi blowing @ wing L.E.



Flex Tail: Q=56 psf, Beta=4  
0 psi blowing @ wing L.E.

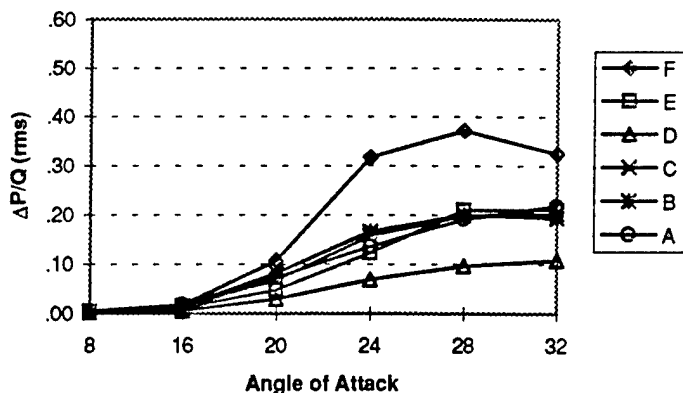


Rigid Tail: Q=56 psf, Beta=4  
0 psi blowing @ wing L.E.

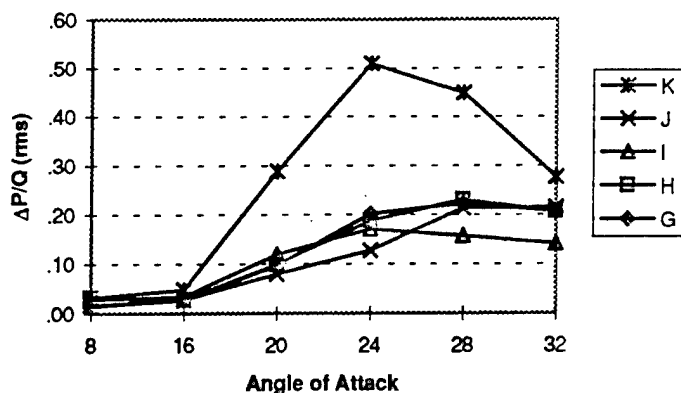


# F-15 Vertical Tail Buffet Test

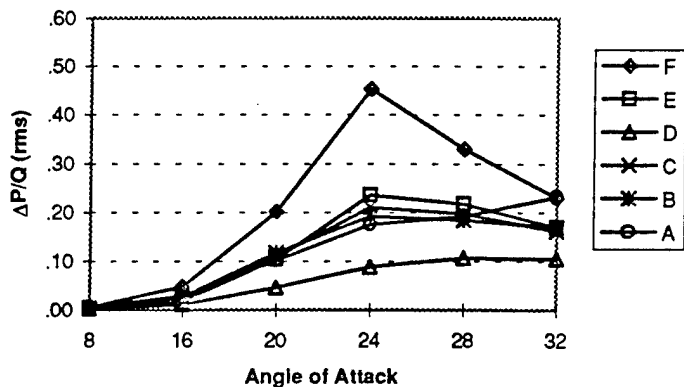
Flex Tail: Q=56 psf, Beta=0  
45 psi blowing @ wing L.E.



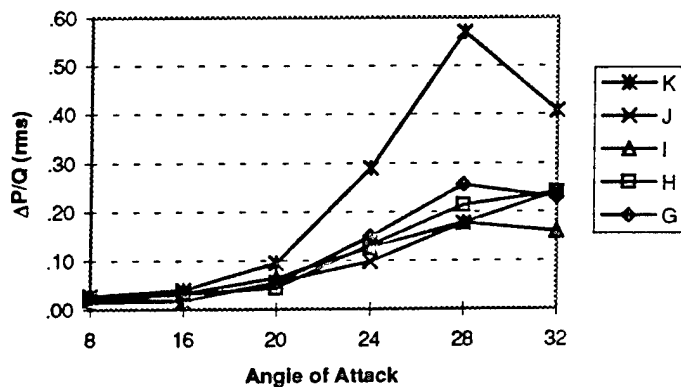
Rigid Tail: Q=56 psf, Beta=0  
45 psi blowing @ wing L.E.



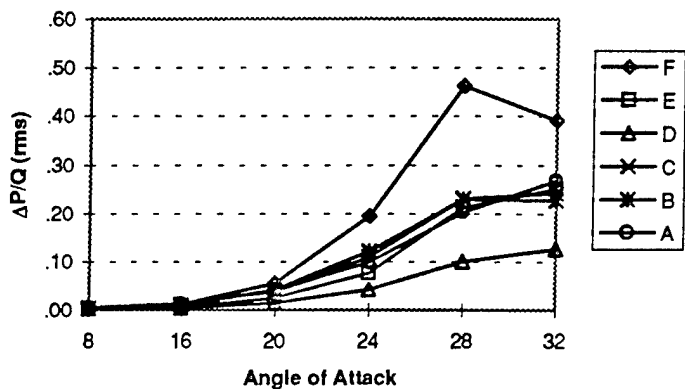
Flex Tail: Q=56 psf, Beta=-4  
45 psi blowing @ wing L.E.



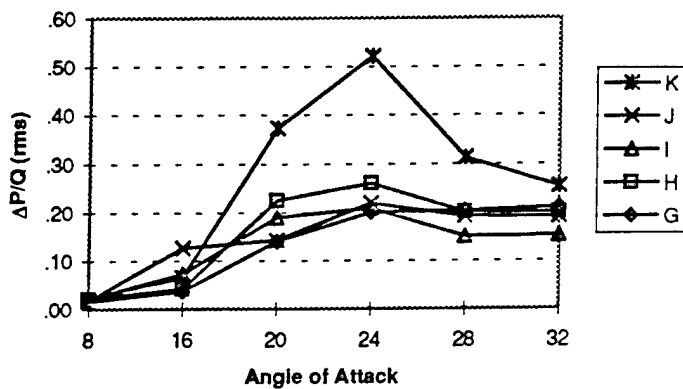
Rigid Tail: Q=56 psf, Beta=-4  
45 psi blowing @ wing L.E.



Flex Tail: Q=56 psf, Beta=4  
45 psi blowing @ wing L.E.

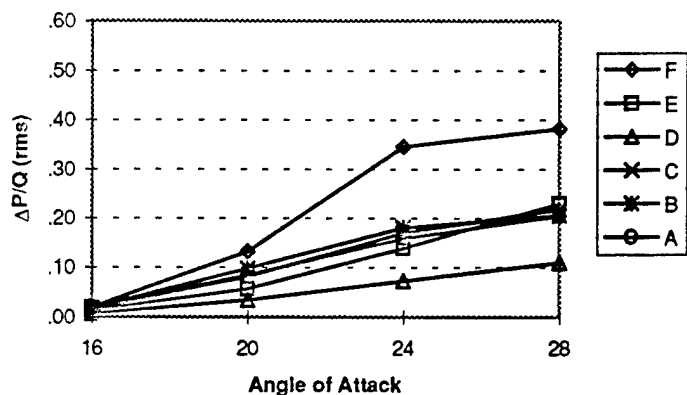


Rigid Tail: Q=56 psf, Beta=4  
45 psi blowing @ wing L.E.

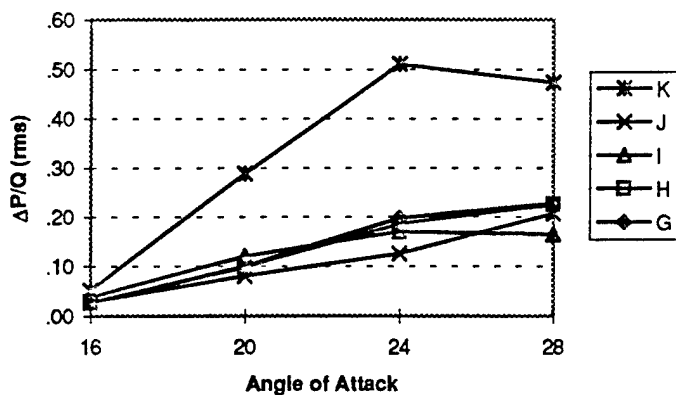


# F-3. Vertical Tail Buffet Test

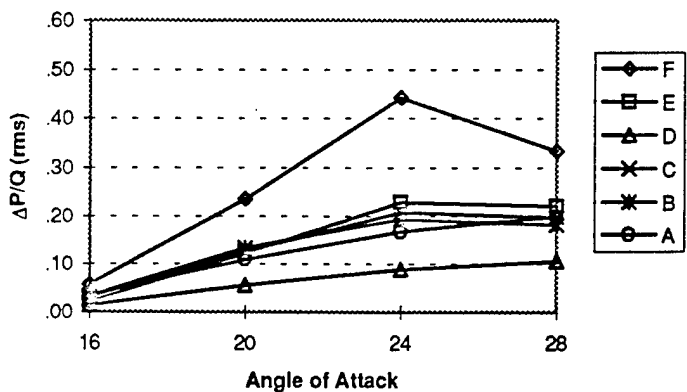
Flex Tail: Q=56 psf, Beta=0  
65 psi blowing @ wing L.E.



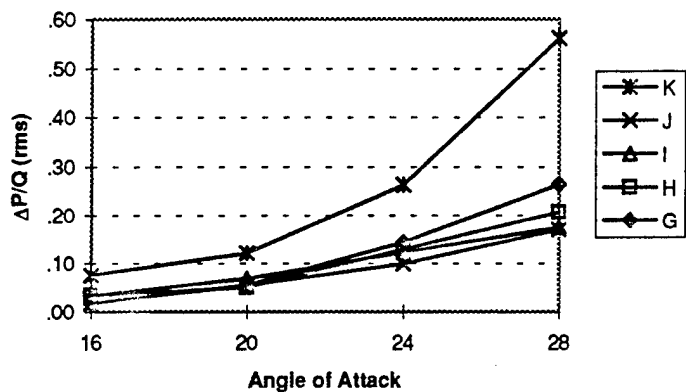
Rigid Tail: Q=56 psf, Beta=0  
65 psi blowing @ wing L.E.



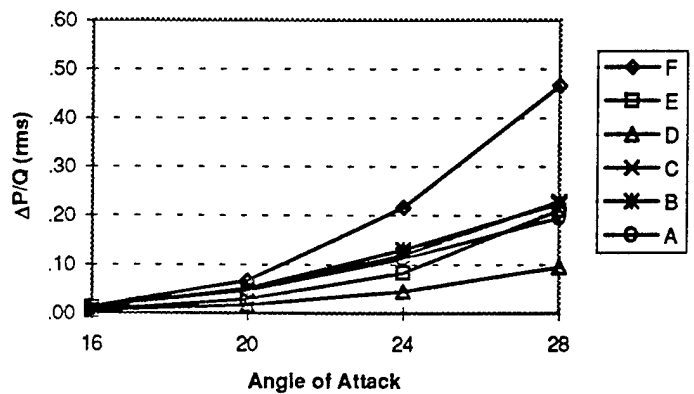
Flex Tail: Q=56 psf, Beta=-4  
65 psi blowing @ wing L.E.



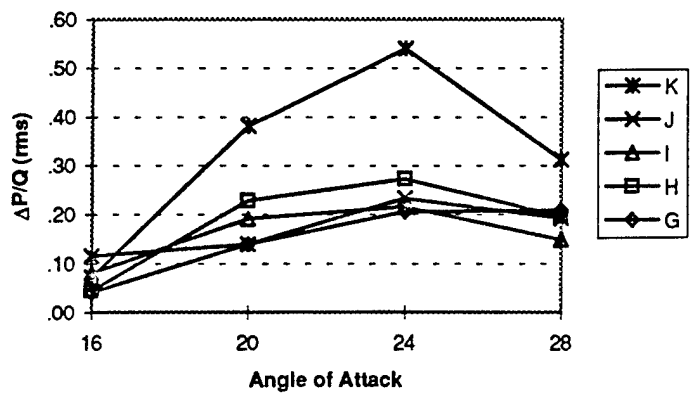
Rigid Tail: Q=56 psf, Beta=-4  
65 psi blowing @ wing L.E.



Flex Tail: Q=56 psf, Beta=4  
65 psi blowing @ wing L.E.

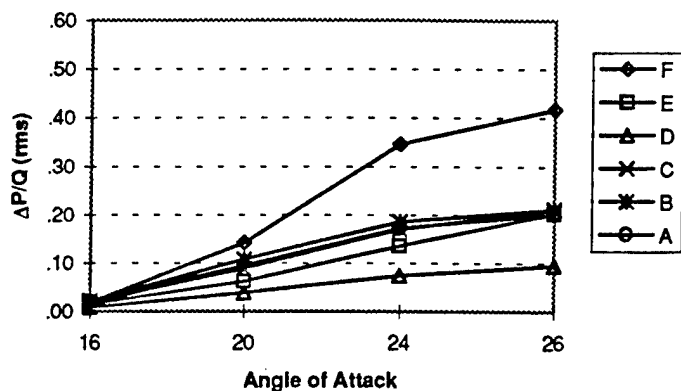


Rigid Tail: Q=56 psf, Beta=4  
65 psi blowing @ wing L.E.

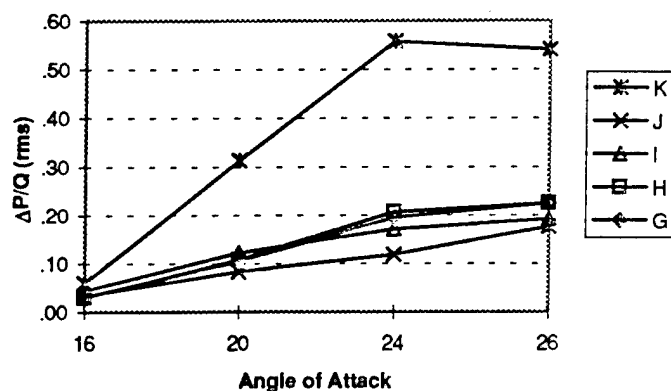


# F-15 Vertical Tail Buffet Test

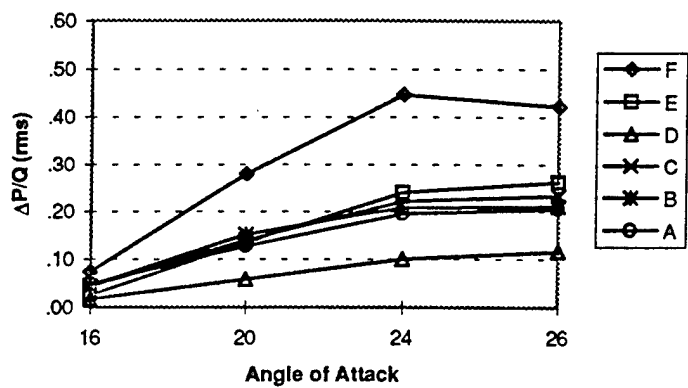
Flex Tail: Q=56 psf, Beta=0  
65 psi blowing @ gun only



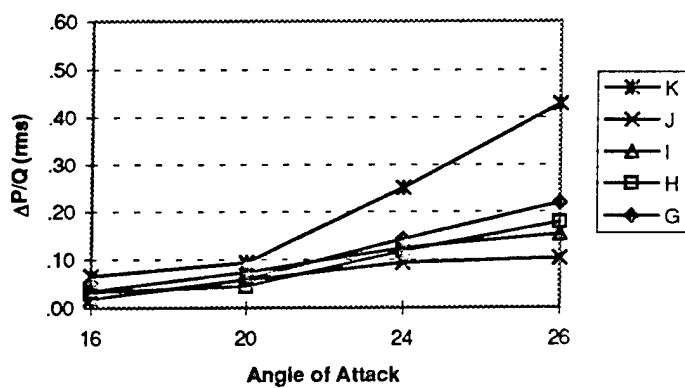
Rigid Tail: Q=56 psf, Beta=0  
65 psi blowing @ gun only



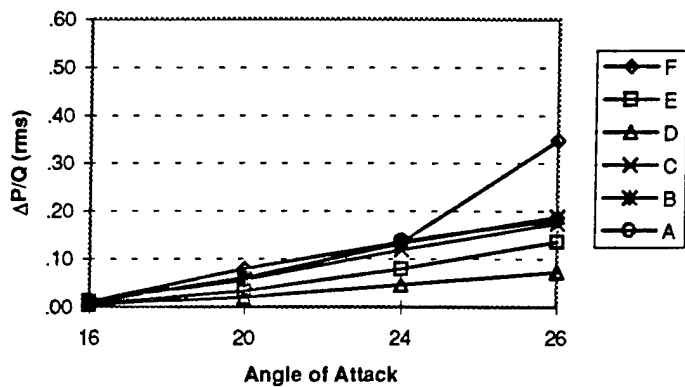
Flex Tail: Q=56 psf, Beta=-4  
65 psi blowing @ gun only



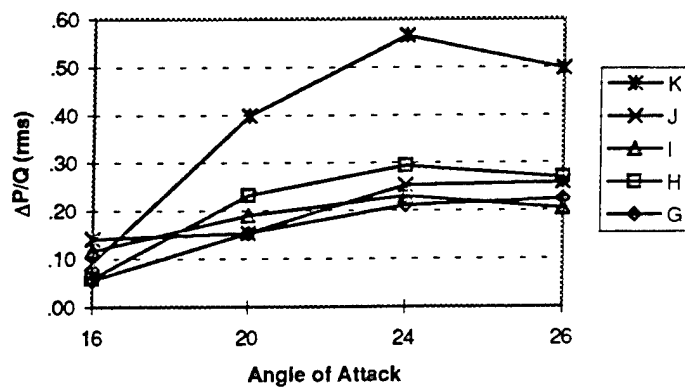
Rigid Tail: Q=56 psf, Beta=-4  
65 psi blowing @ gun only



Flex Tail: Q=56 psf, Beta=4  
65 psi blowing @ gun only

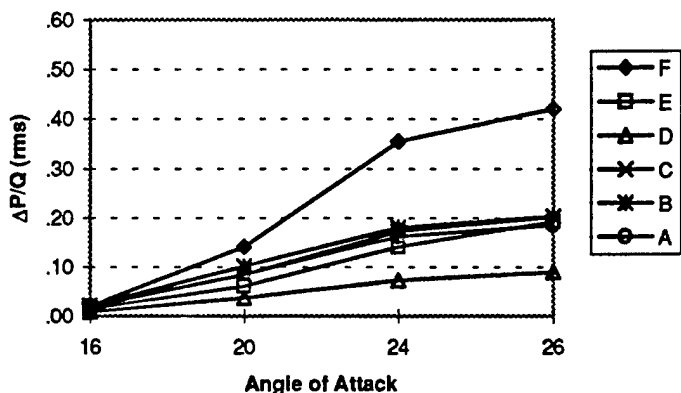


Rigid Tail: Q=56 psf, Beta=4  
65 psi blowing @ gun only

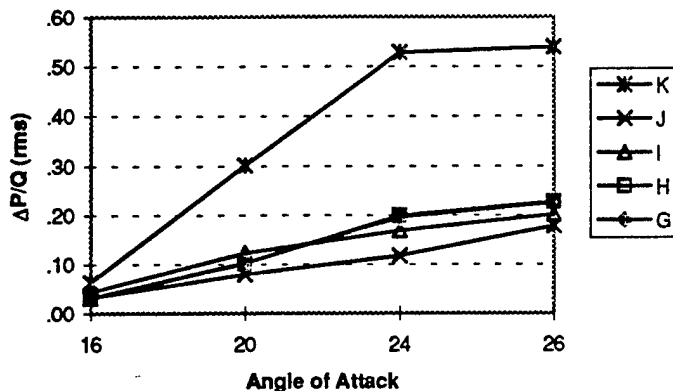


# F-15 Vertical Tail Buffet Test

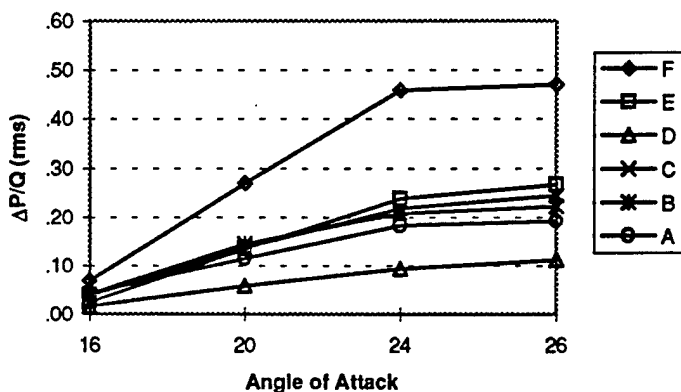
**Flex Tail: Q=56 psf, Beta=0**  
65 psi blowing @ gun & wing L.E.



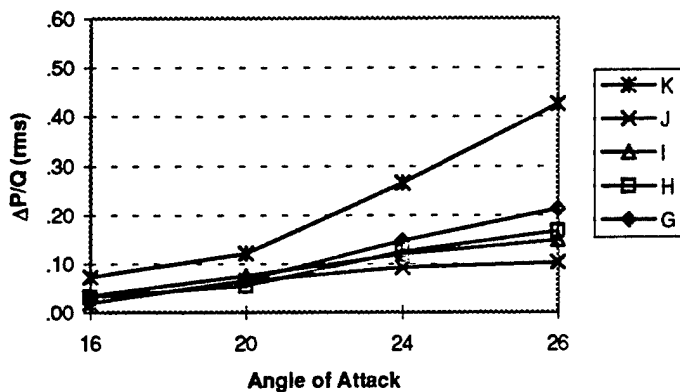
**Rigid Tail: Q=56 psf, Beta=0**  
65 psi blowing @ gun & wing L.E.



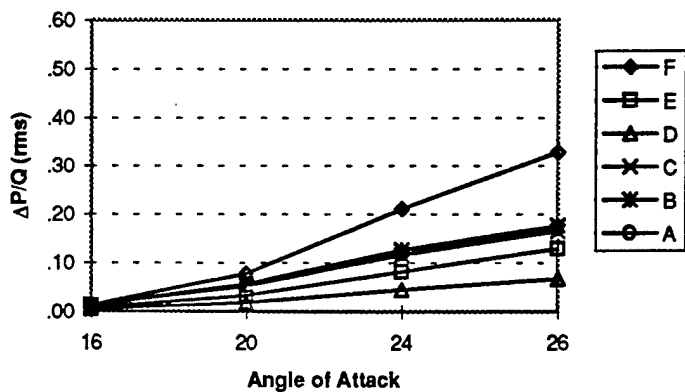
**Flex Tail: Q=56 psf, Beta=-4**  
65 psi blowing @ gun & wing L.E.



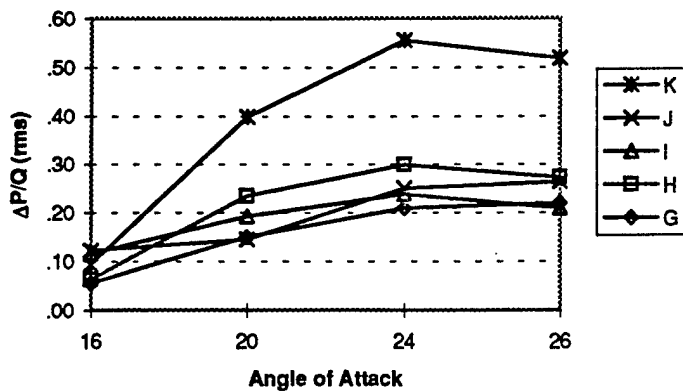
**Rigid Tail: Q=56 psf, Beta=-4**  
65 psi blowing @ gun & wing L.E.



**Flex Tail: Q=56 psf, Beta=4**  
65 psi blowing @ gun & wing L.E.

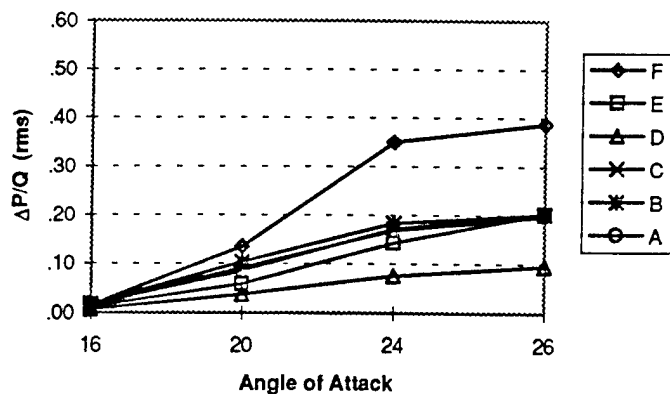


**Rigid Tail: Q=56 psf, Beta=4**  
65 psi blowing @ gun & wing L.E.

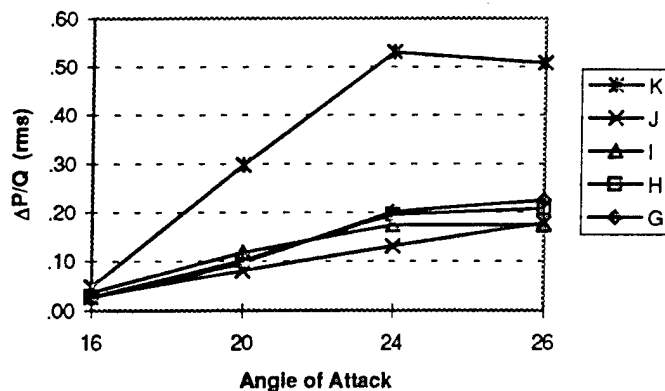


# F-15 Vertical Tail Buffet Test

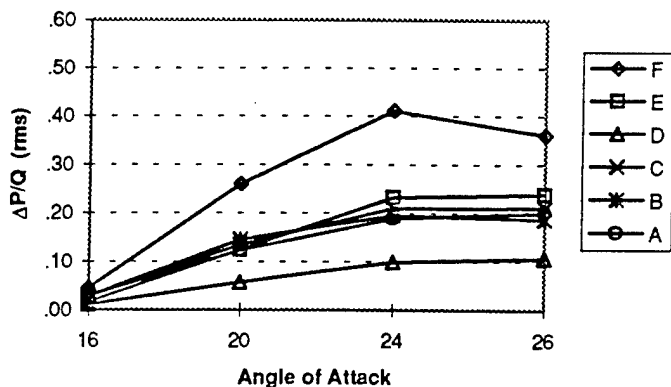
Flex Tail:  $Q=56$  psf,  $\text{Beta}=0$   
87 psi blowing @ nose only



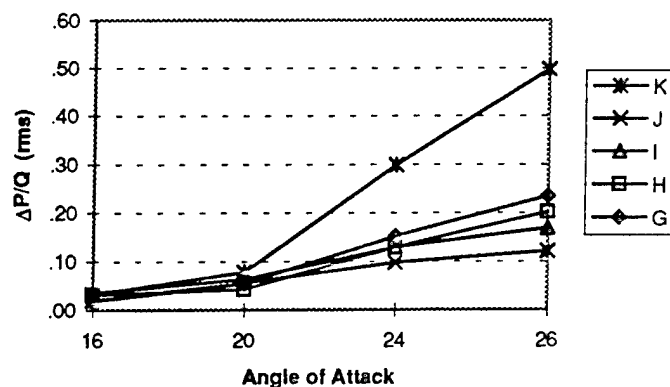
Rigid Tail:  $Q=56$  psf,  $\text{Beta}=0$   
87 psi blowing @ nose only



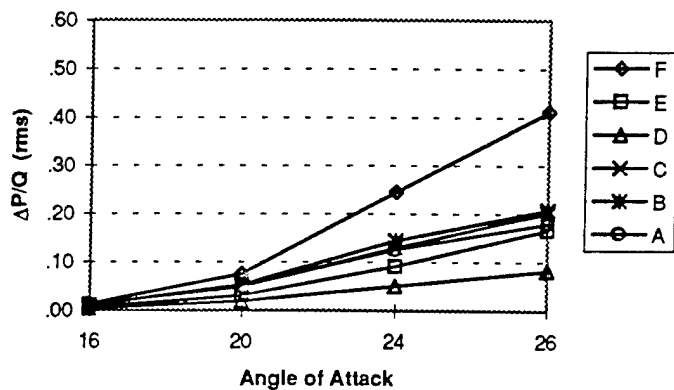
Flex Tail:  $Q=56$  psf,  $\text{Beta}=-4$   
87 psi blowing @ nose only



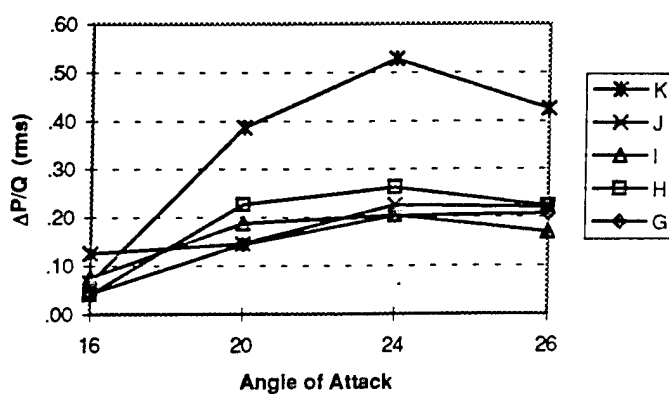
Rigid Tail:  $Q=56$  psf,  $\text{Beta}=-4$   
87 psi blowing @ nose only



Flex Tail:  $Q=56$  psf,  $\text{Beta}=4$   
87 psi blowing @ nose only



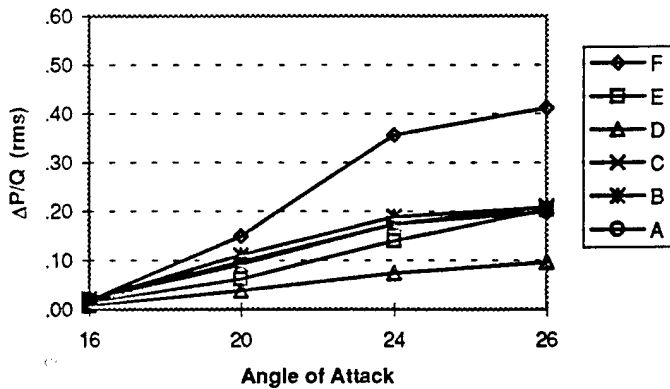
Rigid Tail:  $Q=56$  psf,  $\text{Beta}=4$   
87 psi blowing @ nose only



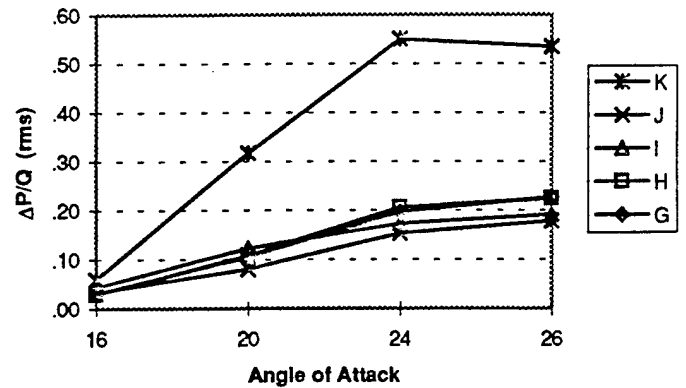


# F-15 Vertical Tail Buffet Test

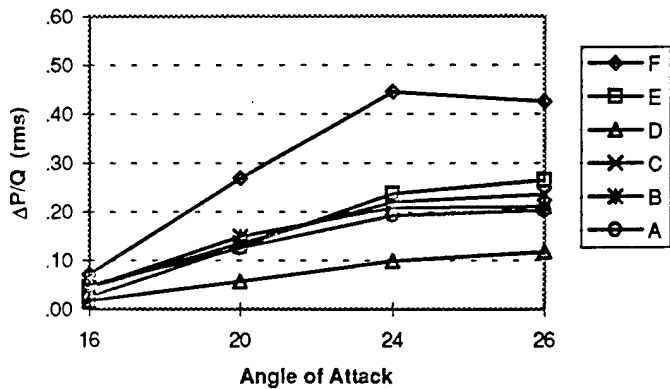
**Flex Tail:  $Q=56$  psf,  $\beta=0$**   
87 psi blowing at nose & 65 psi at gun



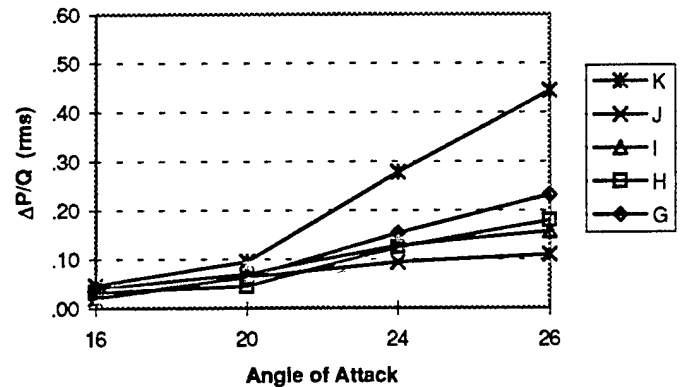
**Rigid Tail:  $Q=56$  psf,  $\beta=0$**   
87 psi blowing at nose & 65 psi at gun



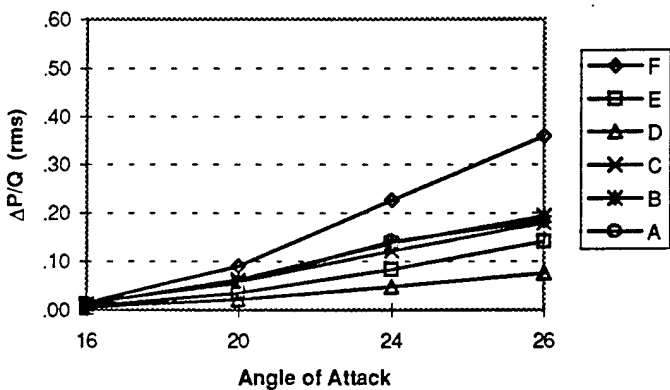
**Flex Tail:  $Q=56$  psf,  $\beta=-4$**   
87 psi blowing at nose & 65 psi at gun



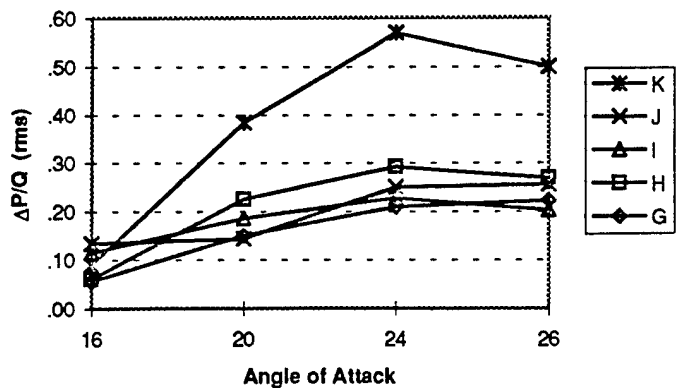
**Rigid Tail:  $Q=56$  psf,  $\beta=-4$**   
87 psi blowing at nose & 65 psi at gun



**Flex Tail:  $Q=56$  psf,  $\beta=4$**   
87 psi blowing at nose & 65 psi at gun

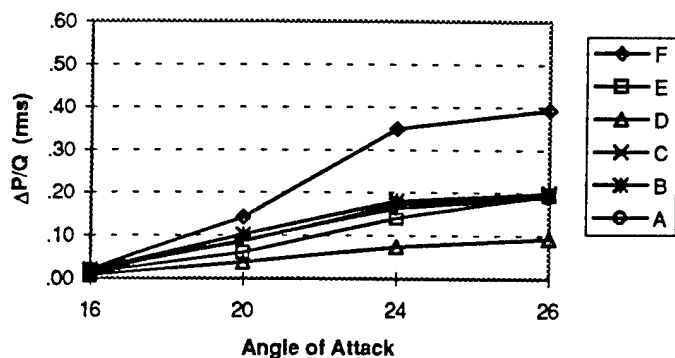


**Rigid Tail:  $Q=56$  psf,  $\beta=4$**   
87 psi blowing at nose & 65 psi at gun

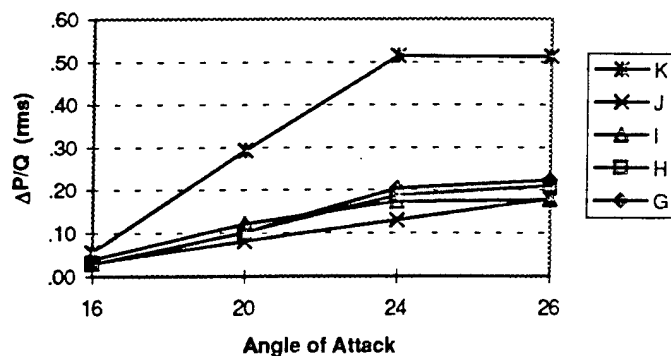


# F-15 Vertical Tail Buffet Test

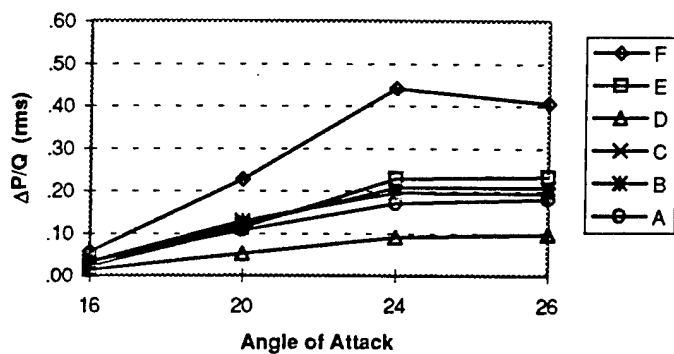
Flex Tail:  $Q=56$  psf,  $\text{Beta}=0$   
87 psi blowing at nose &  
65 psi at wing L.E.



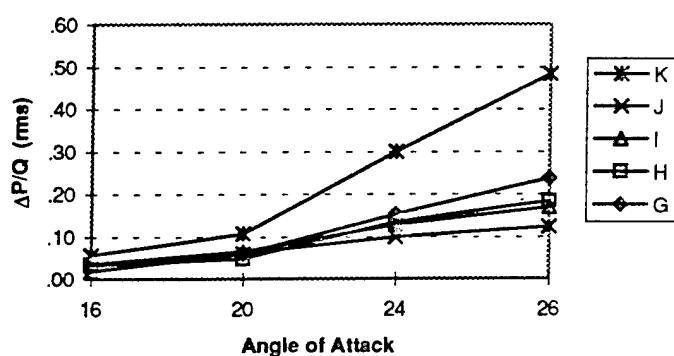
Rigid Tail:  $Q=56$  psf,  $\text{Beta}=0$   
87 psi blowing at nose &  
65 psi at wing L.E.



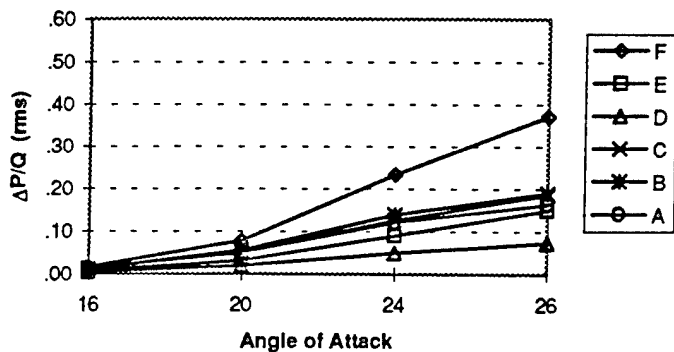
Flex Tail:  $Q=56$  psf,  $\text{Beta}=-4$   
87 psi blowing at nose &  
65 psi at wing L.E.



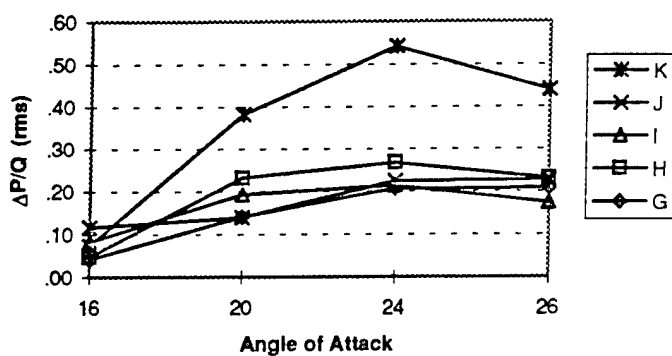
Rigid Tail:  $Q=56$  psf,  $\text{Beta}=-4$   
87 psi blowing at nose &  
65 psi at wing L.E.



Flex Tail:  $Q=56$  psf,  $\text{Beta}=4$   
87 psi blowing at nose &  
65 psi at wing L.E.



Rigid Tail:  $Q=56$  psf,  $\text{Beta}=4$   
87 psi blowing at nose &  
65 psi at wing L.E.

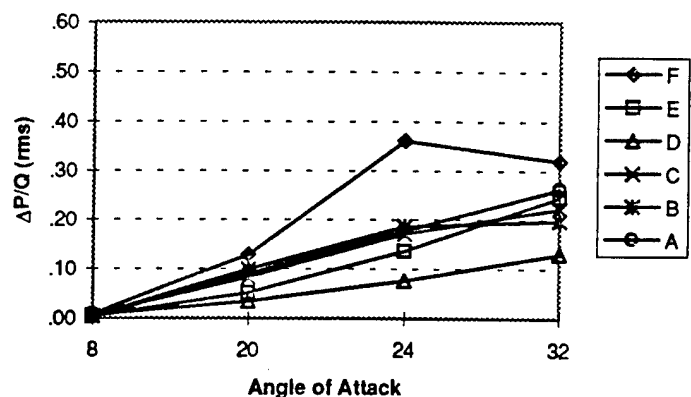


## **NONDIMENSIONAL PRESSURE COEFFICIENTS**

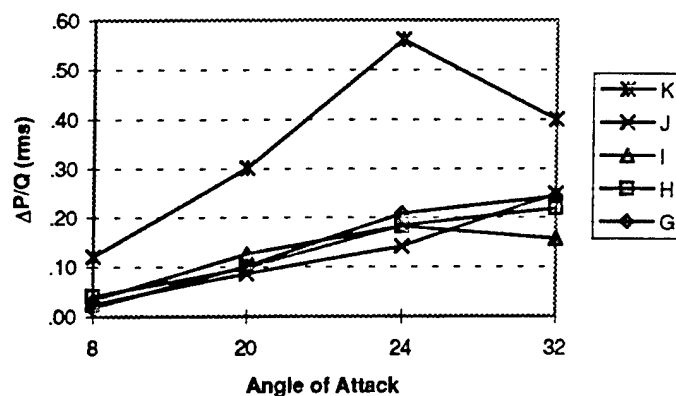
### **3.2 RMS GRAPHS, $Q=30$ PSF**

# F-15 Vertical Tail Buffet Test

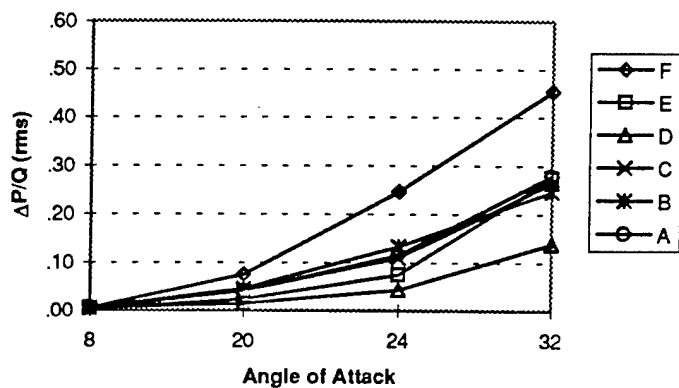
Flex Tail:  $Q=30$  psf,  $\text{Beta}=0$   
0 psi blowing @ wing L.E.



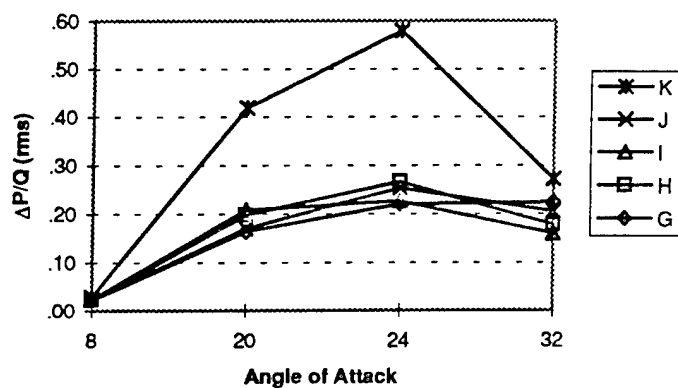
Rigid Tail:  $Q=30$  psf,  $\text{Beta}=0$   
0 psi blowing @ wing L.E.



Flex Tail:  $Q=30$  psf,  $\text{Beta}=4$   
0 psi blowing @ wing L.E.

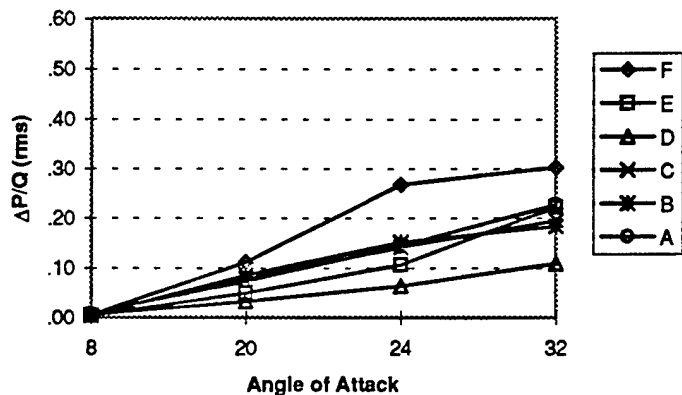


Rigid Tail:  $Q=30$  psf,  $\text{Beta}=4$   
0 psi blowing @ wing L.E.

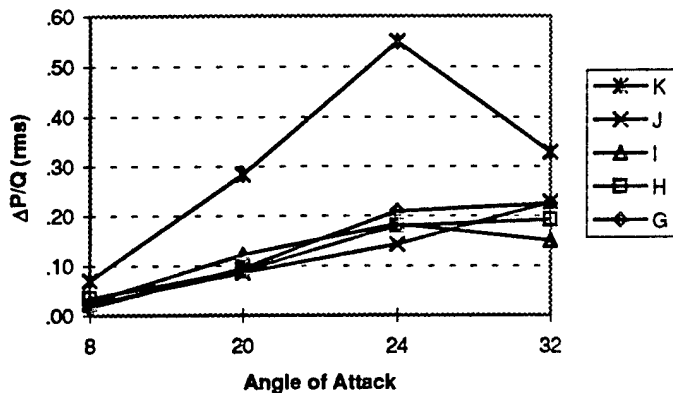


# F-15 Vertical Tail Buffet Test

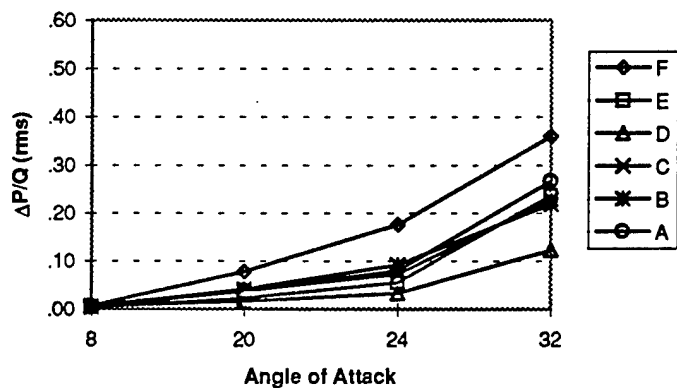
Flex Tail:  $Q=30$  psf,  $\text{Beta}=0$   
45 psi blowing @ wing L.E.



Rigid Tail:  $Q=30$  psf,  $\text{Beta}=0$   
45 psi blowing @ wing L.E.



Flex Tail:  $Q=30$  psf,  $\text{Beta}=4$   
45 psi blowing @ wing L.E.



Rigid Tail:  $Q=30$  psf,  $\text{Beta}=4$   
45 psi blowing @ wing L.E.

